no. A-243

mecc dataquest: latin america

instructional computing courseware
for the **apple® II** computer

mecc dataquest: latin america

instructional computing courseware
for the **apple® II** computer

This manual is compatible

with

the ***MECC Dataquest: Latin America*** disk

Version 1.x

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1 computer disk : 5 1/4 in. + 1 manual.
System requirements: Apple II series; 64K (128K needed to change database); DOS 3.3; Assembly; 1 disk drive; monochrome or color monitor (80-column text capability); Apple-compatible printer recommended.
Title from title screen.
Copy-protected.
Audience: Children (grades 7-12)
Summary: A geography package that provides students with opportunities to learn interesting facts about the geographic, economic, demographic, and cultural characteristics of the thirty-five nations (including the U.S. self-governing dependency, Puerto Rico) that make up the culture region commonly known as Latin America. Serves as a research tool and an aid in the inquiry process as students formulate questions and use the database to access, compare, analyze, and evaluate information to answer them.
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Introduction

The Product at a Glance

MECC Dataquest: Latin America is a database containing diverse and current information on the geographic, economic, demographic, and cultural characteristics of the 35 nations (including the U.S. self-governing dependency, Puerto Rico) that make up the culture region commonly known as "Latin America."

MECC Dataquest: Latin America serves as a research tool and an aid in the inquiry process as students formulate questions and use the database to access, compare, analyze, and evaluate information to answer them. It also provides students with opportunities to learn information-management skills by entering and accessing information from the database and by developing search strategies appropriate to the kind of information needed. Using ***MECC Dataquest: Latin America***, students can:

- select records based on their own criteria;
- sort records alphabetically or numerically;
- select and arrange categories for printing; and
- print reports in record or table format.

MECC Dataquest: Latin America is a read-only database; that is, information cannot be edited or added directly to it. To change or add information, you must use ***MECC Dataquest Composer*** (No. A-172).

Equipment

To use this software, you will need:

- an Apple //e computer with an 80-column card, an Apple //c, or an Apple IIGS, any of which must have at least 64K of memory;
- one disk drive;
- a monitor (monochrome screen recommended); and
- a printer (strongly recommended).

(If you wish to edit or add to the database using ***MECC Dataquest Composer***, at least 128K of memory is required and a second disk drive is recommended.)

NOTES

Background Information

What Are Databases?

Databases are collections of related information stored in an organized, systematic manner. They cover topics from recipes to phone numbers, from baseball statistics to the results of scientific experiments. They come in card files, books, filing cabinets, and computer programs. In fact, there are so many different varieties of databases that the only thing many have in common is their purpose, which is the meaningful and useful organization of information.

For many people, the term "database" has become synonymous with the computer database. Given the difficulty of working with some paper or file-cabinet versions, it's not surprising. Computers have made databases popular by showing how much more can be done with information when it can be accessed easily and quickly.

The database concept is vital to our modern information-based society. Governments, corporations, small businesses, and other institutions all accumulate and need to access vast quantities of information that can be handled only by high-speed computerized systems. Imagine what it would be like if telephone information operators still had to search through printed directories to find the number you need!

There are several reasons why the computer database is becoming an important tool for storing and retrieving information. One reason is that a computer database allows storage of massive quantities of information in a small area. The amount of information contained in a file drawer can often be contained on a single floppy disk.

Another reason is the speed at which information can be retrieved. The computer can locate and retrieve information in a fraction of the time needed to go through a card file.

A third reason is that a computer database allows for easier analysis and cross-referencing of information. It enables a person to look quickly at a collection of information from a number of different perspectives.

Why Use Databases in Social Studies?

At least three arguments can be made for using databases in the social studies classroom. First, in our information-based society, students have an increasing need to acquire higher-level critical-thinking skills. Promoting higher-level thinking skills while teaching content has always been a goal for social studies teachers. Databases are an excellent vehicle for furthering this goal because they facilitate the manipulation of information in novel ways, promote inductive thinking, and invite students to analyze, synthesize, and evaluate the information presented to them.

Second, as the volume of the data in our society has grown, so has the use of computers to store and report the data. Research in most curriculum areas increasingly relies on computer databases for accurate, up-to-date information. Using databases helps students access current information in very little time and with a minimum of effort.

Third, as the use of databases becomes more prevalent, new ethical questions will increase. As informed citizens, students must consider the proper use of databases and be aware of potential abuses of this new technological tool.

An Overview of the Program

THE INSTRUCTIONAL INTENT

Its Place in the Curriculum

MECC Dataquest: Latin America provides students with opportunities to learn interesting facts about the geographic, economic, demographic, and cultural aspects of different nations and to develop and sharpen their problem-solving skills using a database. This package is designed to facilitate the discovery of patterns, trends, or interrelationships among nations by encouraging students to devise a hypothesis and then use the database to access, analyze, compare, and evaluate information that can help prove or disprove it.

Curriculum Area:	Social Studies
Subjects:	World Geography, Information Management
Topics:	Information Retrieval, Government, Demography, Natural Resources, Culture, Geography
Type:	Content-Based Educational Utility
Grade Range:	7-12
Classroom Use:	Individual, Small Group, Large Group

Learning Objectives

MECC Dataquest: Latin America helps students develop and sharpen the following *social studies skills*:

- using summarized information to test hypotheses, draw conclusions, offer solutions to problems, clarify issues, and forecast and create scenarios;
- collecting and analyzing data and preparing reports based on their findings;
- analyzing the basic geographic, economic, demographic, and cultural characteristics of the culture region commonly known as "Latin America";
- comparing and evaluating the variety of ways in which the people of Latin America are related and connected, including:
  - ecologically (for example, sharing natural resources)
  - economically (for example, imports and exports)
  - culturally (for example, linguistic and religious ties);
- comparing and contrasting the characteristics of the economies of different Latin American countries, including:
  - distribution of natural resources
  - means and levels of production
  - use of labor
  - technology
  - consumption patterns;
- recognizing the economic importance of a country;
- recognizing patterns and trends in population growth;
- establishing the interrelationships among population growth, available natural resources, and economic growth; and
- comparing and contrasting patterns of urban and rural population distribution.

Learning Objectives (continued)

MECC Dataquest: Latin America helps students develop and sharpen the following *information-management skills*:

- understanding how information is organized for ease of access;
- accessing a small computerized database to collect and organize information for investigation and study;
- developing search strategies appropriate to the kind of information needed;
- recognizing central elements in collections of information; and
- classifying information.

LEARNING ABOUT THE DATABASE

Getting Started

Start ***MECC Dataquest: Latin America*** by inserting the disk in the drive and turning on your computer. If the computer is already on, insert the disk in the drive and then press the Control Key, the Open Apple (Ó) Key, and the Reset Key at the same time. The main menu soon appears, presenting six options to choose from (Figure 1).

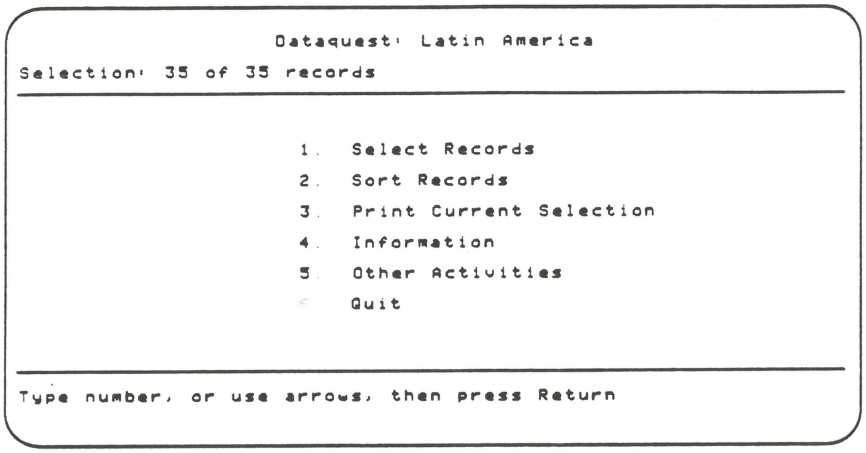


Figure 1

Interpreting the Information on the Screen

Select Option 1, Select Records, from the main menu. The screen shown in Figure 2 will appear, displaying a variety of information.

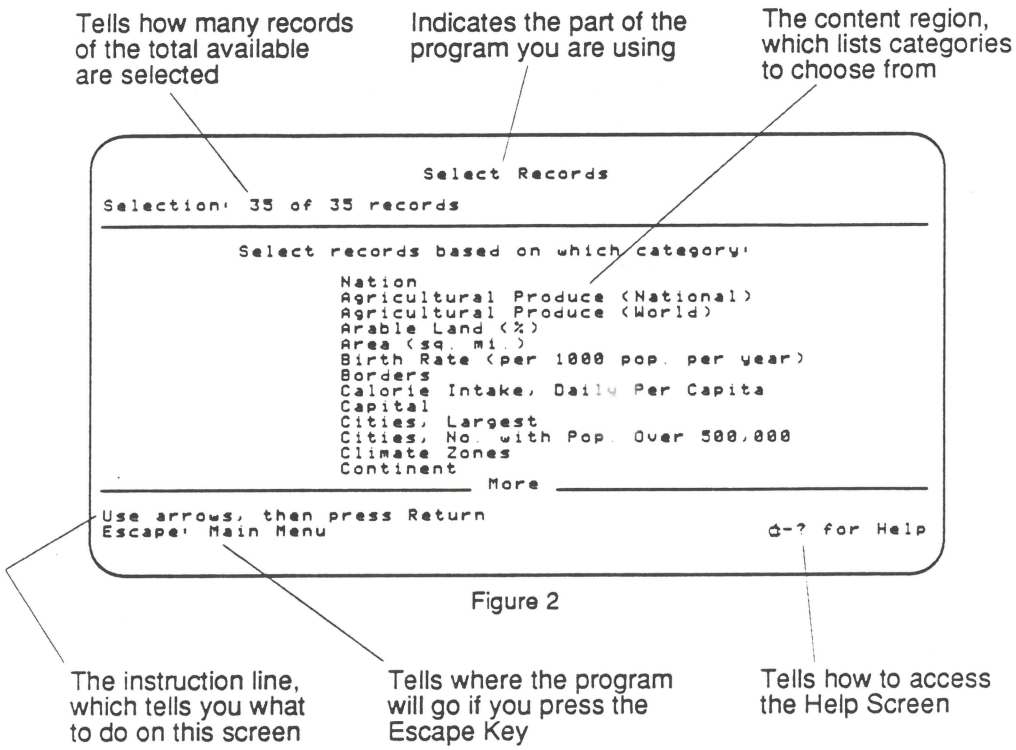

Tells how many records of the total available are selected
Indicates the part of the program you are using
The content region, which lists categories to choose from
Select Records
Selection: 35 of 35 records
Select records based on which category:
Nation
Agricultural Produce (National)
Agricultural Produce (World)
Arable Land (%)
Area (sq. mi.)
Birth Rate (per 1000 pop. per year)
Borders
Calorie Intake, Daily Per Capita
Capital
Cities, Largest
Cities, No. with Pop. Over 500,000
Climate Zones
Continent
More
Use arrows, then press Return
Escape: Main Menu
^-? for Help
The instruction line, which tells you what to do on this screen
Tells where the program will go if you press the Escape Key
Tells how to access the Help Screen

Figure 2

Menu Selection

MECC Dataquest: Latin America features two types of menus: *single-selection menus* that allow you to choose only one option at a time and *multiple-selection menus* from which more that one item can be simultaneously selected.

On a *single-selection menu* (Figure 3) you may select an option by either:

- entering the number of the option and pressing Return, or
- using the Up Arrow (↑) and Down Arrow (↓) Keys to move the cursor bar to the option you wish to use and then pressing Return.

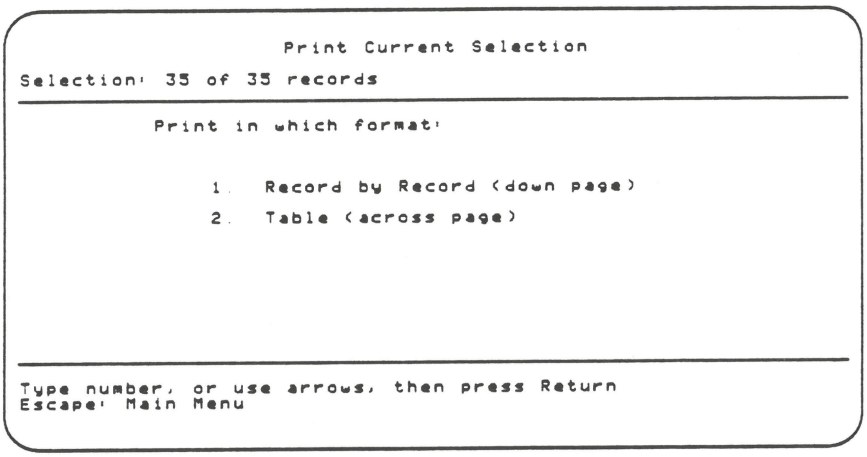

Print Current Selection
Selection: 35 of 35 records
Print in which format:
1. Record by Record (down page)
2. Table (across page)
Type number, or use arrows, then press Return
Escape: Main Menu

Figure 3

On a *multiple-selection menu* (Figure 4) you select or "de-select" an item by using the Arrow Keys to move the cursor bar to the item and then pressing the Space Bar. An arrow or check mark indicates that the item is selected. After selecting all the necessary items, press Return.

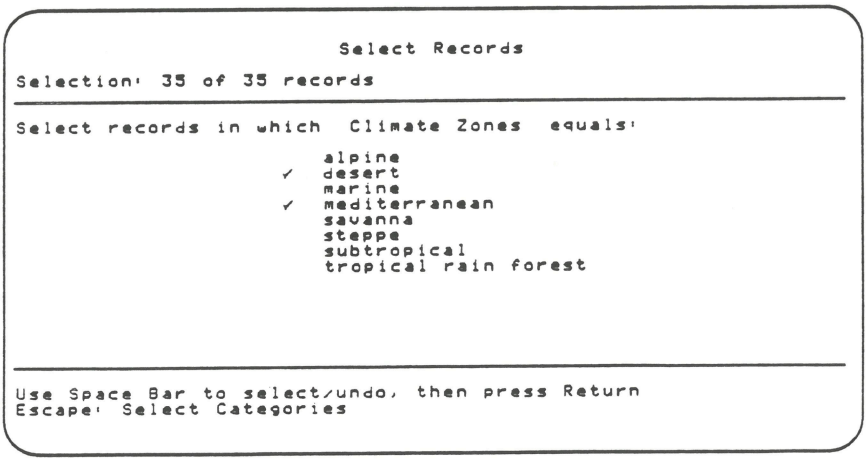


Figure 4

Menu Selection (continued)

As you use the Arrow Keys to move the cursor on menus that fit completely on a single screen, the cursor bar will "wrap around." This means that when the cursor bar is at the bottom of a menu, pressing the ↓ Key will move the cursor back to the top of the screen.

Using the Escape Key

You can use the Escape Key to move from a completed operation to a menu that allows you to begin another operation. You may also use the Escape Key to back up gracefully if you make a mistake. A message indicating what will happen if you press the Escape Key is displayed in the lower left-hand corner of the screen.

Using the Help Screen

If you are unsure about the commands to use to perform a specific task, press Ó-? (hold down the Ó Key as you press the ? Key). You may use this command anytime Ó-? appears in the lower right-hand corner of the screen. This brings up the Help Screen, which presents a list of commands or provides information pertinent to the task at hand.

Modifying the Printer and Disk Drive Setups

Selecting Option 5, Other Activities, from the main menu enables you to view or modify the current setup for the disk drive and printer. You can indicate the number of disk drives you have available and the slot where the printer is connected, enter any special printer commands that you want, and specify the number of characters per line to be printed.

NOTES

Using the Database

PREPARING TO DO A SEARCH

Identifying the Information Needed

Before starting to work with the database, you must know what kind of information needs to be gathered to answer your research question. Study the question carefully and list all the categories in the database that you think could provide relevant information. Next, narrow down the list by identifying those categories that provide the most relevant information. Once you have done this, you are ready to explore the database in a systematic manner.

SEARCHING THE DATABASE

The Search Process at a Glance

Selecting records is the way the computer locates specific information within the database. It is a narrowing-down process in which each selection you make limits the number of records that are selected. Each time you make a new category selection, the computer finds the entries you specify from the records you have already selected. If no records are selected before printing the report, all the records are printed. Searching ***MECC Dataquest: Latin America*** is a process requiring several steps, including:

- selecting one category at a time from a menu that consists of a list of all of the categories in the database;
- determining the information within each category that you want the computer to locate; and
- repeating these steps until the categories have been selected.

Note: Searching for two or more items within a single category constitutes an "or" search (see page 14). For example, you can search for all nations in which "Imports" includes "petroleum" *or* "motor vehicles." Nations that meet *either* criteria are selected. Searching for two or more items in *different* categories, however, constitutes an "and" search. For instance, you can search for all nations in which "Imports" includes "petroleum" *and* "Population" is greater than 5,000,000. Only those nations that meet *both* criteria will be selected.

Initiating a Search

Select Option 1, Select Records, from the main menu. A menu listing all the categories that you can search is displayed (Figure 5). Choose any category that you want to search.

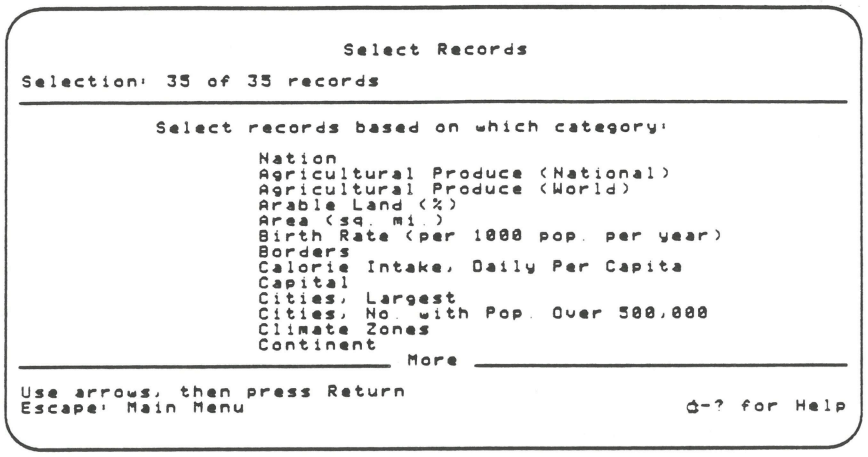


Figure 5

After selecting a category, a menu is presented listing the entries of information within that category (Figure 6). Select as many entries as necessary to get the information you want.

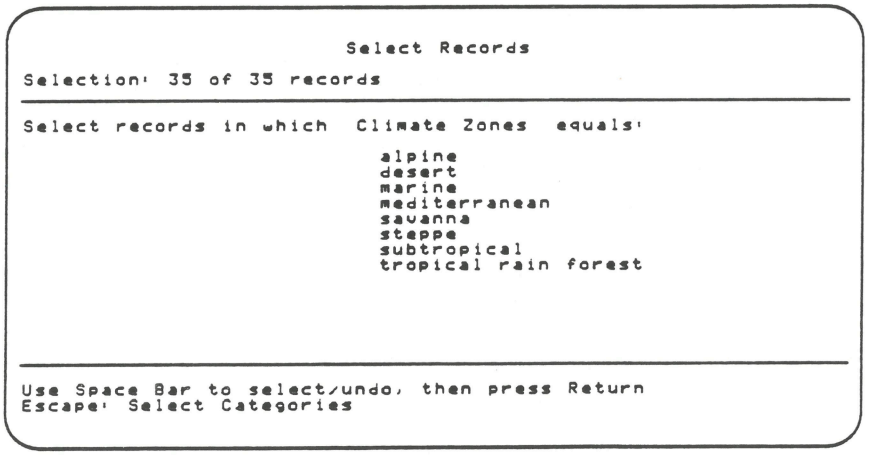


Figure 6

Note that if you select more than one entry within a category, the computer will find all records containing *any* of the entries that you have selected. For instance, if you select the category "Climate Zones" and then select the entries "tropical rain forest," "desert," and "savanna," the computer will find *all* of the records containing *at least one* of the three entries that you have selected.

Searching a "Words" Category

Each category in ***MECC Dataquest: Latin America*** is considered to be a word or number category, depending on the nature of the data in it. When you conduct a search, the type of menu shown and the actions that you need to take will vary, depending on the type of data found in that category.

In categories that contain "Words" as a data type, you select from a menu that contains a list of all entries in that category (Figure 7).

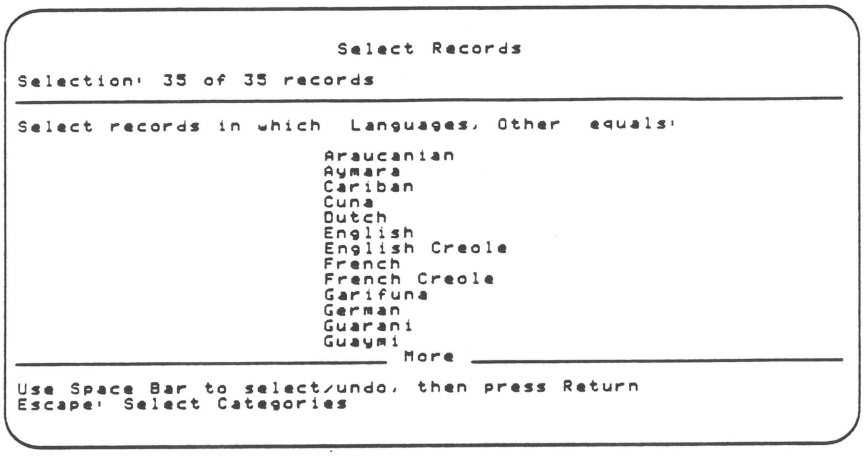


Figure 7

Searching a "Numbers" Category

If the category type is "Numbers," you select from a menu like the one shown in Figure 8 and then specify the number that you want the computer to match or compare entries with. In entering numbers, you may use the comma to indicate thousands, millions, and so on. The comma, however, is *not* necessary.

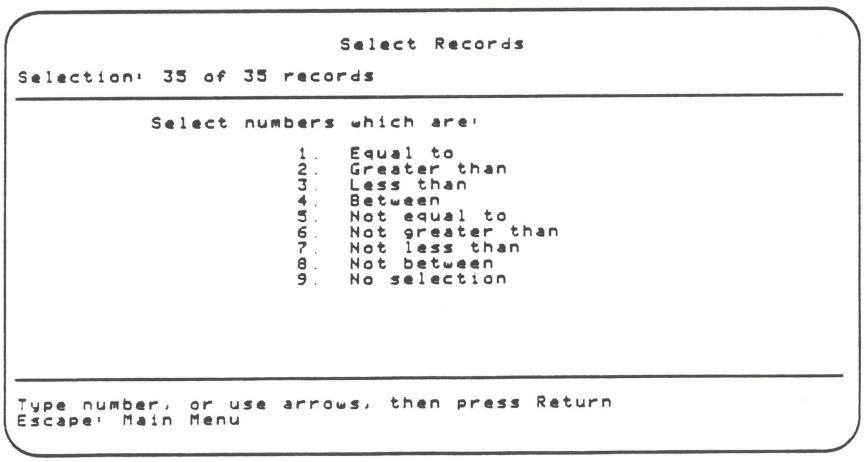


Figure 8

SORTING THE INFORMATION

The Sorting Process at a Glance

Sorting is how the computer organizes the records selected during the search process. Through sorting, you can group identical items (for instance, all of the countries that export petroleum) or you can sequence a range of items (such as ordering the countries from largest population to smallest). Sorting is valuable because it arranges information in ways that make it easy to observe patterns and relationships among nations. With ***MECC Dataquest: Latin America*** you can sort data alphabetically from A to Z or numerically from lowest to highest value, depending on whether that category contains data in the form of words or numbers, respectively. You can also sort in reverse order in either case.

Doing Single Sorts

After selecting Option 2, Sort Records, from the main menu, a list of all the database categories is presented (Figure 9).

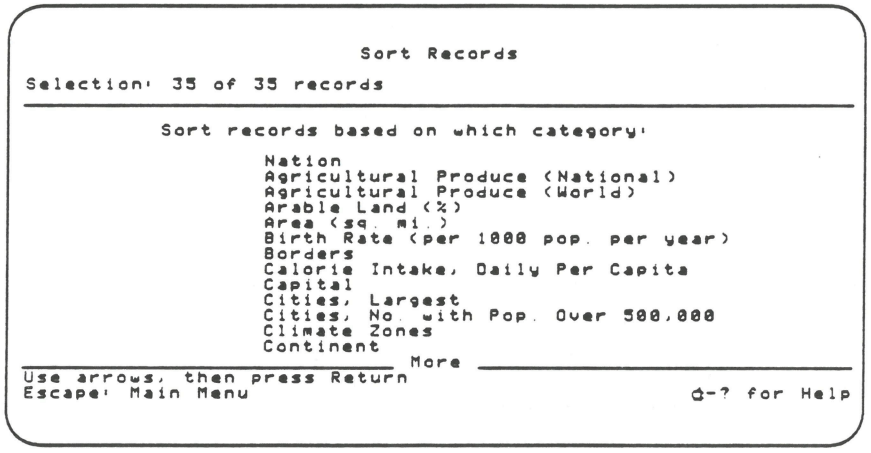


Figure 9

Doing Single Sorts (continued)

Select the category for which you want the records sorted. A menu will appear asking you to indicate whether you want a regular or reverse sort (Figure 10).

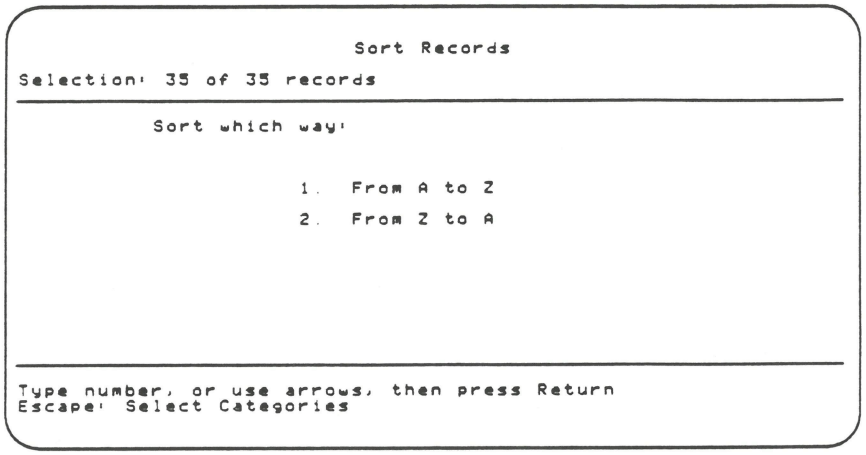

Sort Records
Selection: 35 of 35 records
Sort which way:
1. From A to Z
2. From Z to A
Type number, or use arrows, then press Return
Escape: Select Categories

Figure 10

Doing Multiple Sorts

Sometimes you will need to sort by more than one category. In such cases, you will sort only one category at a time. Before you start to sort, rank the categories according to their relative importance. Then sort the records, *beginning with the least important category and ending with the most important.*

To rank categories, you might ask questions to determine the groups and subgroups in which you want the information arranged. For example, you may ask, "What main groups of information do I need? Which category would classify the records in such groups?" That category is the most important one and should be sorted last. Next ask, "How should the major groups be subdivided? Which category does this?" This is your second most important category. You may proceed in this manner until you have ranked all the categories for which you want the records to be sorted.

An Example of a Multiple Sort

Let's say that you want to sort the Latin American countries by *predominant language* and you want each language listed in alphabetical order. Under each language, you want the countries sorted by *population* so that the record for the most populous country comes first and subsequent records appear in order of descending population. To do this, *first sort by population* from highest to lowest and *then sort by predominant language* from A to Z.

PRINTING A DATABASE REPORT

An Overview of the Printing Process

Printing a report is the process of specifying how a report should be put together. It involves selecting a format for displaying the data, determining which categories of information to include, and indicating where categories should be placed.

Choosing a Report Format

MECC Dataquest: Latin America offers two report formats: *record format* and *table format.* The *record format* prints information line-by-line, down the page (Figure 11). This format is most appropriate for printing data that is best displayed in paragraphs or lists.

```
                    Print Current Selection
Selection: 35 of 35 records
-------------------------------------------------------------------------------

Nation: Antigua and Barbuda
Continent: North America
Capital: Saint John s
Area (sq. mi.): 170
Arable Land (%): 55

Nation: Argentina
Continent: South America
Capital: Buenos Aires
Area (sq. mi.): 1,073,399
Arable Land (%): 13

Nation: Bahamas
Continent: North America
Capital: Nassau
-------------------------------------------------------------------------------
Use Up/Down Arrows to move through report
Escape: Choose Destination for Report
```

Figure 11

The *table format* report prints information across the page in rows and columns (Figure 12). This format is useful for displaying numbers or for comparing information and searching for patterns and relationships.

```
                    Print Current Selection
Selection: 35 of 35 records
-------------------------------------------------------------------------------
Nation              Continent      Capital        Area (sq. m
==================  =============  =============  ===========
Antigua and Barbuda North America  Saint John s            170
Argentina           South America  Buenos Aires     1,073,399
Bahamas             North America  Nassau               5,382
Barbados            North America  Bridgetown             166
Belize              North America  Belmopan             8,867
Bolivia             South America  La Paz             424,164
                                   Sucre
Brazil              South America  Brasilia         3,286,487
Chile               South America  Santiago           292,135
Colombia            South America  Bogota             440,831
Costa Rica          North America  San Jose            19,730
Cuba                North America  Havana              42,804
Dominica            North America  Roseau                290
-------------------------------------------------------------------------------
Use Up/Down Arrows to move through report
Escape: Choose Destination for Report
```

Figure 12

Choosing the Information to Print

After selecting the report format, you need to specify the categories of information to be included in the report. You may choose as many or as few categories as you think are necessary.

Customizing the Record Layout

The final step in preparing a report is to determine how you want the information displayed. The main aspect to consider at this point is the clarity of presentation of the information. You can customize the record layout by changing the order in which the categories will appear and by increasing or decreasing the width of the columns so that all the information fits and the columns are clearly separated from each other (Figure 13).

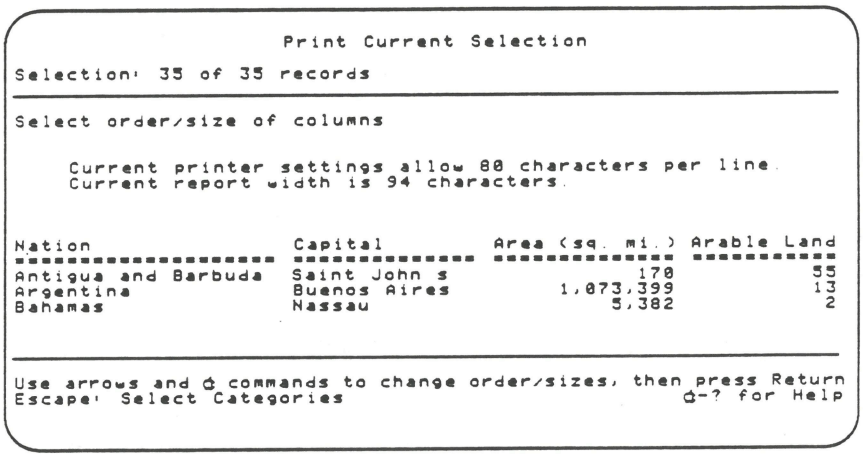


Figure 13

If you are using a *record format*, select the order in which the categories will appear by using the ↑ and↓ Keys to highlight a category you want to move. Press ⌘-> to exchange its position with that of the following category. Use ⌘-< to exchange the position of a category with the preceding one.

If you are using a *table format*, you can adjust a column width by placing the cursor on the column that you wish to adjust and pressing ⌘-← to make the column narrower or ⌘-→ to make it wider. To select the order in which the categories will appear, use the ↑ and ↓ Keys to highlight a category you want to move. Press ⌘-> to exchange its position with that of the following category. Use ⌘-< to exchange the position of a category with the preceding one.

Printing the Report

With ***MECC Dataquest: Latin America*** you can print a report directly to the screen or to a printer.

Print your report to the *screen* to view it before making a printed document. Seeing the report on the screen can help you evaluate the format you have chosen and make sure that all of the information you will need in your report has been included.

Print your report to the *printer* to make a printed, "hard" copy of the database report. A point to remember is that unusually long category names will sometimes not appear in their entirety on the screen. The information printed out using a printer, however, will show the information in its complete form.

If the information from the database is to be used in a research paper or another type of word-processed document, you may want to print your report to a report file (Option 3 in Print Current Selection). This option allows you to print your report to a DOS 3.3 text file. You can then load the report file into ***MECC Writer*** or *AppleWriter*™, where it can be edited as a word-processed document.

If your report is formatted record-by-record, you may want to print your report to a transfer file. This option allows you to create a DOS 3.3 text file that includes all of the records of your database, but without the category names. The data can then be read by any program that reads DOS 3.3 text files. The primary purpose of creating a transfer file is to collect the data from several database disks onto one database disk using ***MECC Dataquest Composer***. See the manual accompanying ***MECC Dataquest Composer*** for additional information on merging database files.

Before printing a hard copy of your database report, make sure that your printer setup is correct. If you need more information about using a printer before printing your database report, see "Using a Printer with This Courseware" on page 69 or check your printer manual.

Use in an Instructional Setting

PREPARATION

Introducing the Concept of Databases

Before students set out to manipulate the information in the database, they need to have a clear concept of what databases are, understand how information is collected and organized, and be familiar with the basic terms related to databases. Here are some suggestions for introducing students to the concept of databases:

1. Ask students to define the term "database." Write these definitions on the board without comment. Then discuss what these definitions have in common. Emphasize that databases are *organized* collections of information.

2. Invite students to provide some examples of non-computerized databases. How is the information in them organized? What is the reason for such organization? Have students suggest other ways in which the information could be organized.

3. Have students write on a piece of paper three facts about any subjects of interest. Ask them whether their facts can be considered a database given that they constitute a collection of data. If their answer is "no," lead students to state the reasons and suggest ways to organize the information so that it can be used as a database.

   If students think their facts constitute a database, tell them that you want to try using it to see how it works. Ask a simple question such as "What was the date of the first moon landing?" Assuming no one had the answer, discuss the need to know the classification scheme in order to ask questions that are appropriate for the kind of information in the database. The question might well have been answered if students had been asked to write down facts about the history of space travel. Ask students to suggest ways of organizing their facts so that they can be used as a database.

4. Using Handout 1, "Introducing the Computer Database," go over the terms for the different kinds of information that can be found in a database.

Preliminary Exploration of the Database

The appropriate use of a database requires that students be familiar with its content and features. Having a general idea about the content increases the likelihood that students will ask questions that are within the scope of the database. Knowing how to use the database enables students to focus on doing the research and not on the mechanics of the program.

1. Ask students what broad types of information they think are included in ***MECC Dataquest: Latin America.*** For each type of information, what categories are likely to be included?

2. Distribute Handout 2, "A Guide to ***MECC Dataquest: Latin America.***" Explain that the activities in the handout are designed to familiarize them with the features and content of the database. Ask students to do the activities on the handout. Follow up by discussing different aspects of the database, such as:

   - What major types of information does this database contain?
   - Give examples of different categories and their entries.
   - What's the total number of records in the database?

   Clarify any questions or difficulties students may have regarding selecting, sorting, and printing the records.

4. Using Handout 3, "Category Summary," go over the definitions for the various categories, pointing out the types of information that are included in or excluded from a category. Discuss possible reasons for including these categories and their importance. Point out that this information lends itself well to comparison and analysis.

5. An optional activity is to have students research and collect information to add to the database. This activity can be very useful in helping students recognize the difficulties in gathering data, understand the importance of using varied and reliable sources, and develop critical reading skills in order to identify relevant information.

   Discuss with students world geography topics that interest them but are not included in the database. Decide on a topic and assign to each student three or more countries to collect information on. Once the data is gathered, discuss the process and issues of data collection. Some questions you can ask are:

   - What difficulties did they face in trying to find the data?
   - What sources did they use?
   - Could they enter the data as is or do they need to be concerned with such consistency issues as choice of terminology to describe a category or the units of measurement to be used?

   If you wish, you can incorporate the data into the database. See "Modifying ***MECC Dataquest: Latin America***" on page 67 for information on how to do this.

A MODEL FOR RESEARCHING A QUESTION

It is an important goal of social studies teachers to encourage their students to develop skills in critical thinking while learning the content of the discipline. This means that learners should be encouraged to go beyond simple questions of knowledge and comprehension toward application, analysis, synthesis, and evaluation.

The research model suggested here affords students opportunities to engage in problem solving while learning interesting facts about world geography. It emphasizes a process approach to the use of the database and provides a framework to guide students' thinking as they attempt to answer their questions. Although a series of successive steps are specified, the model is not intended to be followed in a linear or rigid manner. Students should be made to realize that at times several steps could be occurring simultaneously, that they could go several times through the same few steps before moving on to a different one, or that in some cases some steps may be left out. The purpose of the model is to help students become more deliberate and systematic about their approach to problem solving. The general components of the model are:

- formulating a question;
- gathering information ;
- stating a tentative conclusion;
- evaluating the conclusion; and
- discussing the findings.

A minimum of four class periods are necessary to implement this model. The first day's focus is on planning. Students decide on a question to research and then identify the information that they will need. On the second day, students gather and organize the information obtained. The students spend the third day analyzing the information, stating a conclusion, and revising it. Finally, on the last day, they inform the class of their findings and discuss what they learned from the activity.

Formulating a Question

1. Begin the activity by emphasizing the importance of questions to the process of conducting research. Questions guide the inquiry process and require you to focus more clearly on the problem. Offer some examples of interesting questions about the nations of Latin America:

   - In which countries is Spanish *not* the predominant language?
   - Which countries have populations of more than 40 million?

   Ask students whether these questions (and others like them) are interesting. (Probably, yes.) Are they important? (Perhaps.) Students should be encouraged to see that these questions merely require the collection of data and are easily answered using the database.

2. Next, have students compare the previous questions with the following ones:

   - What do countries with a per capita income of less than $1000 have in common?
   - What role does Central America play in the world economy?

   How are these questions different from the previous ones? (They require that you go beyond the step of collecting data and that you interpret and analyze the facts, establish relationships, and identify patterns.) Research concerns itself with questions like these. Explain to students that databases are a powerful tool to help manipulate information in a variety of ways to help uncover such relationships.

3. Tell students that during the next few class periods they will use ***MECC Dataquest: Latin America*** to gather and analyze information to answer a question of their own. Explain that for this initial activity they will work in groups, but later they will work individually. Briefly explain the research method suggested here. Distribute Handout 7, "Map of Latin America," and tell students that it is provided for reference.

4. Divide students into groups. Explain that each group is to decide on a question that they would like to investigate and then research it using the database. You may want to distribute Handout 4, "Research Topics," which gives suggestions of areas to investigate. Using Handout 5, "Researching a Question," ask each student in the group to write two research questions he or she thinks could be answered using the database. Encourage students to ask questions that require analysis, but understand that writing good questions is a skill that develops with practice. Also keep in mind that some students need more guidance and feedback regarding the quality of their questions. Next, tell students to share their questions with the members of their group and to discuss how appropriate each would be as the group question. Lastly, each group should select a question for research.

Formulating a Question (continued)

5. Have students think about some likely answers to their questions and then rephrase the answers in the form of a generalization or hypothesis. If more than one answer is given, have students discuss the merits of each and evaluate whether it is a valid possibility. In some instances, students may not have sufficient knowledge of the subject to be able to formulate a reasonable hypothesis. In such cases, students may skip this step and proceed to gather the data.

6. Finally, have students identify and write on Handout 5 the categories of information that they will need to research in order to answer the question. Tell them to consider whether they need to combine information from various categories.

Gathering Information

1. Begin by pointing out that for this activity each group will be using the database as their primary source of information. Distribute Handout 6, "Sorting the Data." Tell students to use the handout to plan how they'll sort the information and record what they actually do.

2. Allow students sufficient time to use the database to gather the information that they need. It is possible that students may want to experiment with different combinations of categories. Encourage such experimentation, reminding students that not all information is significant and that some will be discarded in the end as irrelevant to their task.

3. When a printer is available, encourage students to make printed copies of the various reports and refer to them to study the data. Suggest that they briefly note at the top of each report the sorting criteria or any other information that may help them distinguish reports from similar ones.

   If a printer is not available, suggest to students that they copy any information that is practical to copy (such as short reports). When the reports are extensive, suggest that they analyze the data on the screen, taking notes on the major points and writing down examples. Remind students to keep close track of the categories selected and the sorting procedure used in obtaining reports that are not printed out because they may need to reproduce the report later to verify the information or to study it further.

Stating a Tentative Conclusion

1. Have each group study the data that they gathered. Tell students to summarize the information and write short *descriptive* statements of their findings and record them in the appropriate section of Handout 5, "Researching a Question." Note that the emphasis at this point is on simply describing the data, *not* on interpreting it.

2. Have students analyze and interpret the findings, looking for patterns and relationships. Then have them write a generalization or conclusion based on their interpretation of the information.

Evaluating the Conclusion

Ask students to assess whether the conclusion represents a reasonable answer to the original question. What pieces of information support their decision? Tell students that, if necessary, they should search the database again to find more information that lends support to their conclusion. Also recommend that they try to identify additional sources of information that need to be consulted.

Discussing the Findings

Have each group present their findings to the class. In addition to discussing their question and conclusion, ask each group to comment on the strategies they used to do the research and discuss the strengths and limitations of ***MECC Dataquest: Latin America*** as a tool for their research.

FOLLOW-UP ACTIVITIES

1. Give students opportunities to work individually, generating their own research questions and using the database to answer them.

2. Ask students to share with the rest of the class newspaper or magazine articles on current events in Latin America. After the discussion, allow students to use the database to find more information about the featured country or countries.

3. Ask students to find out which, if any, Latin American countries are represented by foreign students attending their school. Using the database, have them find some differences and similarities among those countries. Invite the foreign students to take part in the ensuing discussion.

4. Encourage students to formulate a question and challenge the rest of the class to answer it.

5. Using ***MECC Dataquest Composer*** or any other database, create a database disk to be used by students to enter up-to-date information about changes in Latin American countries, such as government coups, economic trends, and so on. Some categories you might include in the database are country, source of information, date, category it refers to, and information. Place the disk somewhere easily accessible to students. Tell them that, whenever they read about a change in a country, they should enter that information in the database. Check the database periodically, discuss with the class the changes that have been entered, and determine whether the information can be used to update ***MECC Dataquest: Latin America***.

NOTES

Student Handouts

INTRODUCING THE COMPUTER DATABASE

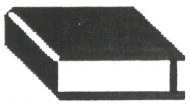
Database Structure and Terms

Database Name: ***Books***

A database is an organized collection of information.

= Database: ***Books***

Within a database there are records—collections of data items that are logically connected in some way.



= Record

Within each record there are many categories of information about the record.

Title
Author
Publisher
Copyright Date
Copies Sold
Description

Each category contains information. Each item of information is called an *entry*. Each category can contain blank, single, or multiple entries. (For instance, in the following example, the "Author" category contains two entries because the book *Maps* has two authors.)

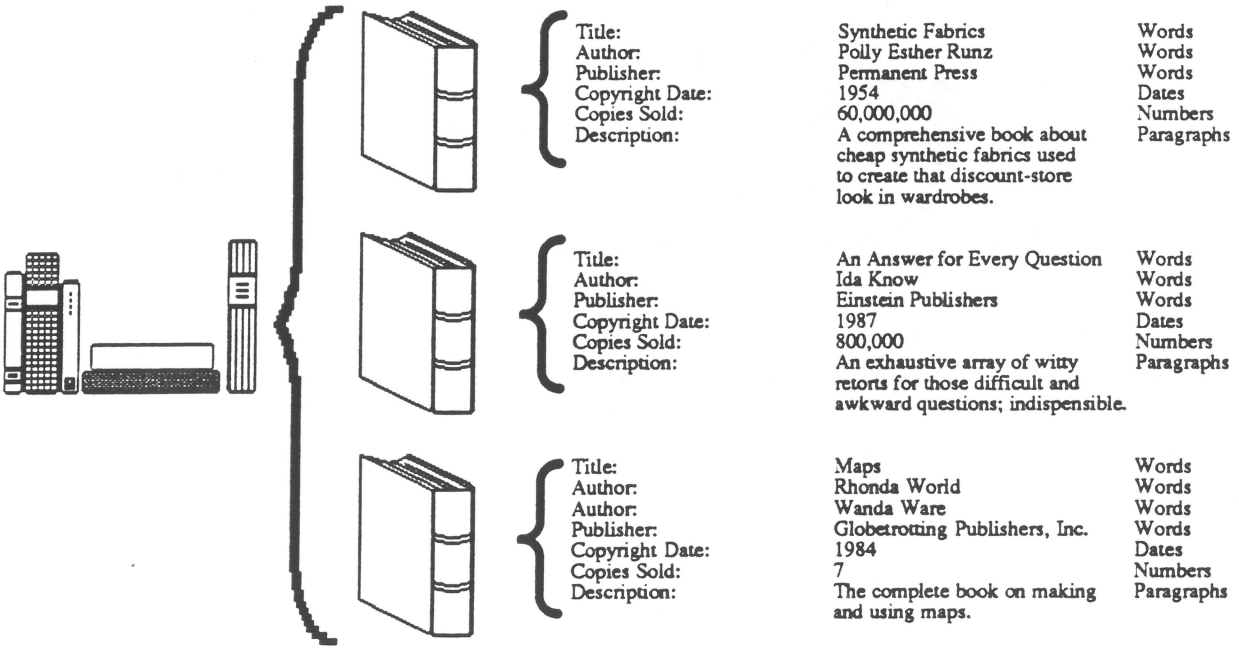
CATEGORY	ENTRY
Title:	Maps
Author:	Rhonda World
Author:	Wanda Ware
Publisher:	Globetrotting Publishers, Inc.
Copyright Date:	1984
Copies Sold:	7
Description:	The complete book on making and using maps.

INTRODUCING THE COMPUTER DATABASE (continued)

The types of data that may be found in each category may be words, numbers, dates, or paragraph-type data.

CATEGORY	ENTRY	TYPE
Title:	Maps	Words
Author:	Rhonda World	Words
Author:	Wanda Ware	Words
Publisher:	Globetrotting Publishers, Inc.	Words
Copyright Date:	1984	Dates
Copies Sold:	7	Numbers
Description:	The complete book on making and using maps.	Paragraphs

Summary: The information in a database is arranged in records. Each record contains categories, which may contain data entries of any of four types: words, numbers, dates, or paragraphs.


DATABASE
RECORD
CATEGORY
ENTRY
TYPE
Title: Synthetic Fabrics Words
Author: Polly Esther Runz Words
Publisher: Permanent Press Words
Copyright Date: 1954 Dates
Copies Sold: 60,000,000 Numbers
Description: A comprehensive book about cheap synthetic fabrics used to create that discount-store look in wardrobes. Paragraphs
Title: An Answer for Every Question Words
Author: Ida Know Words
Publisher: Einstein Publishers Words
Copyright Date: 1987 Dates
Copies Sold: 800,000 Numbers
Description: An exhaustive array of witty retorts for those difficult and awkward questions; indispensible. Paragraphs
Title: Maps Words
Author: Rhonda World Words
Author: Wanda Ware Words
Publisher: Globetrotting Publishers, Inc. Words
Copyright Date: 1984 Dates
Copies Sold: 7 Numbers
Description: The complete book on making and using maps. Paragraphs

A GUIDE TO *MECC DATAQUEST: LATIN AMERICA*

Directions

1. This guide is an introduction to the use of ***MECC Dataquest: Latin America.*** It provides step-by-step instructions on what to do to select and sort records and to print a report.

2. Read each instruction carefully and then do what it tells you to do. If you have any questions about the proper use of a program feature, ask your teacher for assistance.

3. The research question for this activity is:

What are the three most populous nations in South America?

Getting Started

1. Start ***MECC Dataquest: Latin America*** by inserting the disk in the drive and turning on your computer.

   If the computer is already on, insert the disk in the drive and then press the Control Key, the Open Apple (Ó) Key, and the Reset Key at the same time.

2. The main menu soon appears, presenting six options to choose from (Figure 1).

   The first three options allow you to access and manipulate the data. You will work with these options shortly.

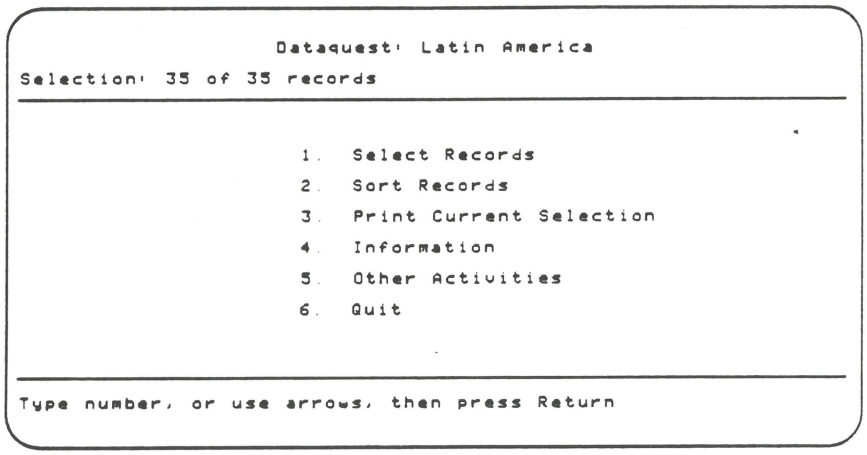


Figure 1

3. Select Option 4, Information, to read about the features of this program. Then press the Escape Key to go back to the main menu.

4. Select Option 5, Other Activities, from the main menu. Note that with this option you can modify the disk drive and printer setups and enter special print commands. Generally, you will not need to concern yourself with this option. If, however, you do need more information about using this option, ask your teacher or, if you are using this program in a computer lab, ask the person in charge of the lab.

A GUIDE TO *MECC DATAQUEST: LATIN AMERICA* (continued)

Interpreting Information on the Screen

1. Select Option 1, Select Records, from the main menu. The screen shown in Figure 2 will appear.

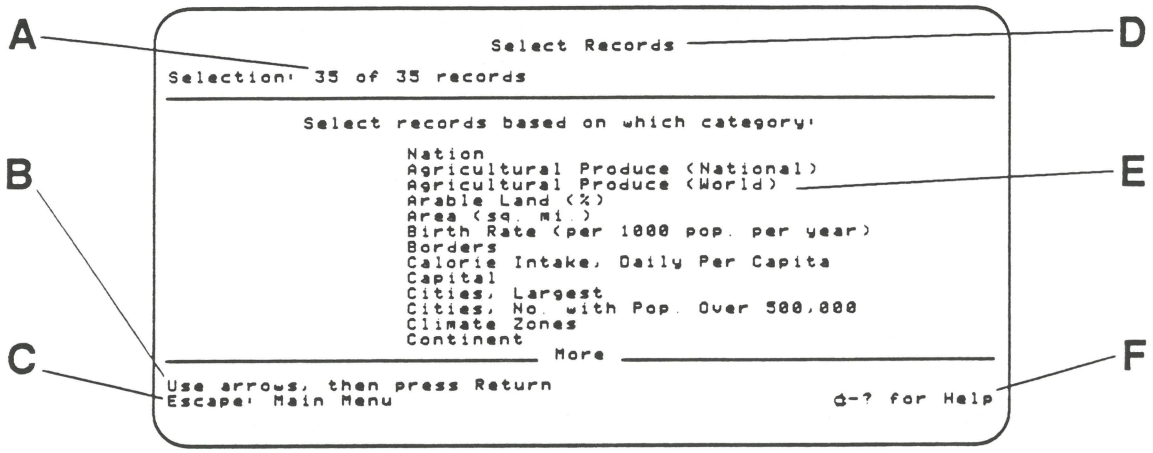


Figure 2

Before you start your search, note the variety of information available on the screen and the function that each of these pieces of information serves:

A Tells how many records of the total available are selected.

B Gives you instructions about which keys to use to select the information on the screen.

C Tells where the program will go if you press the Escape Key. You can use this key to move from one completed operation to a menu that allows you to begin another operation. You may also use the Escape Key to back up gracefully if you make a mistake.

D Indicates the part of the program you are using.

E The content region, which lists all the categories you can search.

F Indicates how to access the Help Screen. The Help Screen lists the commands that you may use to perform different tasks.

A GUIDE TO *MECC DATAQUEST: LATIN AMERICA* (continued)

Selecting Records

Selecting records is how the computer locates information in the database. Each selection you make narrows down the number of records from the ones already selected. If no records are selected before you print a report, all of them are printed. To select records, follow these steps:

1. Select the category "Continent." (Use the ↑ and ↓ Keys to move the highlighted bar to that category and then press Return to select it.)

2. When the Continent menu appears, select "South America" (Figure 3). (Use the ↑ and ↓ Keys to move the highlighted bar to "South America" and press the Space Bar to select it.) An arrow or check mark will appear next to "South America," indicating that it is selected. You don't need to select any other entries, so press Return to end the selection.

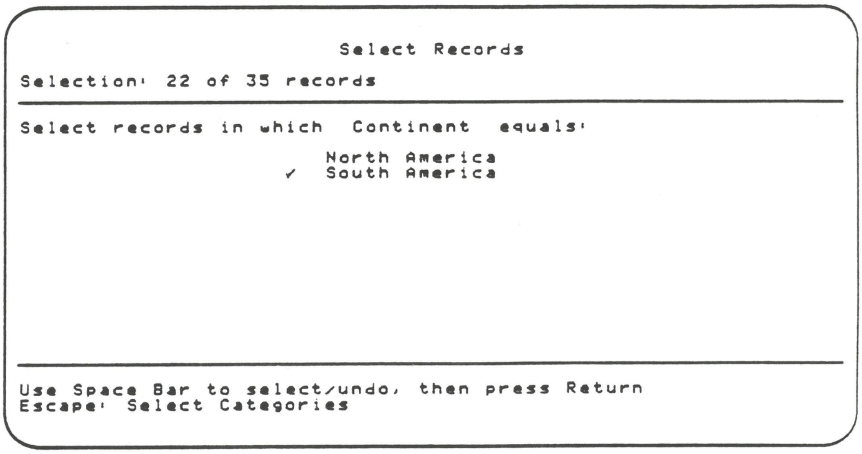

Select Records
Selection: 22 of 35 records
Select records in which Continent equals:
North America
✓ South America
Use Space Bar to select/undo, then press Return
Escape: Select Categories

Figure 3

3. Select the category "Population" using the same procedure.

4. Next, select "Greater than" to search for populations greater than a certain number. When you are asked to specify a value (Figure 4), type a relatively low one, such as 1,000,000, to make sure all the countries you may be interested in are selected. After pressing Return, use the Escape Key to go back to the main menu.

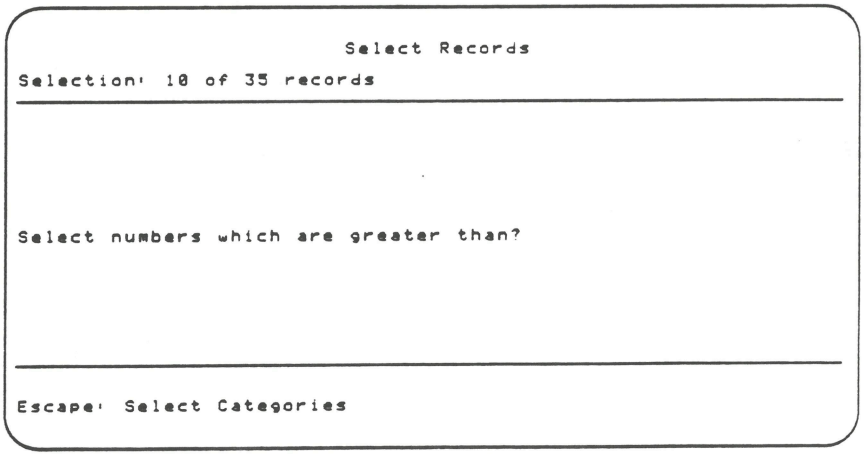


Figure 4

Tip When typing numbers, you may use commas to indicate thousands, millions, and so on, *but it is not necessary to do so.*

A GUIDE TO *MECC DATAQUEST: LATIN AMERICA* (continued)

Sorting Records

Sorting is how the computer organizes the records selected during the search process. Through sorting, you can group identical items (for instance, all of the countries that export large amounts of petroleum) or you can sequence a range of items (such as ordering the countries from largest population to smallest). Sorting is valuable because it arranges information in ways that make it easy to observe patterns and relationships among nations.

With ***MECC Dataquest: Latin America*** you can sort information alphabetically from A to Z or numerically from lowest to highest value, depending on whether that category contains data in the form of words or numbers, respectively. You can also sort in reverse order in either case. To sort records, follow these steps:

1. Select Option 2, Sort Records, from the main menu. A list of all the database categories is displayed (Figure 5). Select "Population" as the category to sort the records on.

2. Sort the records from highest to lowest and then press the Escape Key to go back to the main menu.

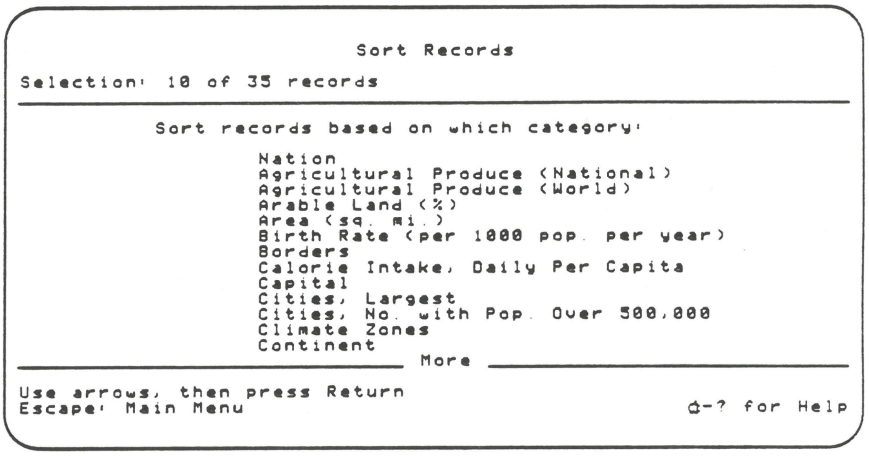


Figure 5

Tip Sometimes you'll need to sort by more than one category. In such cases, you will sort one category at a time. Before you start to sort, rank the categories according to relative importance. Then sort the records, *beginning with the least important category and ending with the most important.*

To rank categories, you might ask questions to determine the groups and subgroups in which you want the information arranged. You might ask, "What main groups of data do I need? What category would classify the records in such groups?" That category is the most important one and should be sorted last. Next ask, "How should the major groups be subdivided? What category does this?" This is your second most important category. Keep doing this until you've ranked all the categories for which you want records sorted. For example, let's say you want to sort countries by *predominant language* with the languages listed in alphabetical order. Within each language group, you want the countries sorted by *population* so that the record for the most populous country comes first and subsequent records appear in order of descending population. To do this, *first sort by population* from highest to lowest and *then sort by predominant language* from A to Z.

A GUIDE TO *MECC DATAQUEST: LATIN AMERICA* (continued)

Printing a Report

Before you can print a report, you must specify how the report should be put together. You must select a format for displaying the data, determine which categories of information to include, and indicate where the categories should be placed.

MECC Dataquest: Latin America offers two different report formats: *record format* and *table format*. The *record format* prints information line by line, down the page. It's most appropriate for printing data that is best displayed in paragraphs or lists.

The *table format* prints information across the page in rows and columns. This format is most useful when you need to compare information and search for patterns and trends. To prepare a report for printing, follow these steps:

1. Select Option 3, Print Current Selection, from the main menu. Choose the table format.

2. Specify the information that you want to include in your report by selecting the categories "Population," "Continent," and "Nation." Use the ↑ and ↓ Keys to move the highlighted bar to the category "Nation" and press the Space Bar. An arrow will appear to the left of "Nation," indicating that it is selected (Figure 6). Move the highlighted bar to the next category and select it. Once you have selected all three categories, press Return.

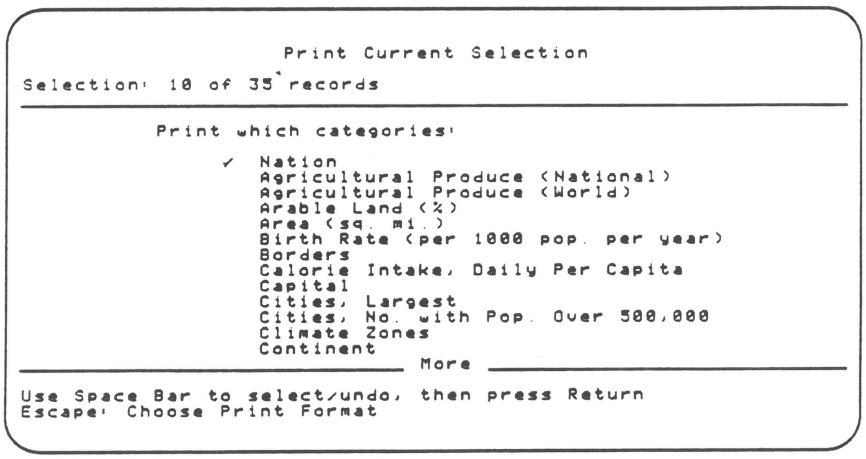


Figure 6

A GUIDE TO *MECC DATAQUEST: LATIN AMERICA* (continued)

Printing a Report (continued)

3. The screen shown in Figure 7 appears, displaying the information in columns and rows and indicating whether the information fits across the screen. At this point you can change the order in which the categories are displayed and change the width of the columns. Order the categories as follows: Nation, Continent, Population. Use ⌘-> or ⌘-< to exchange the position of a category with that of the following or preceding category, respectively.

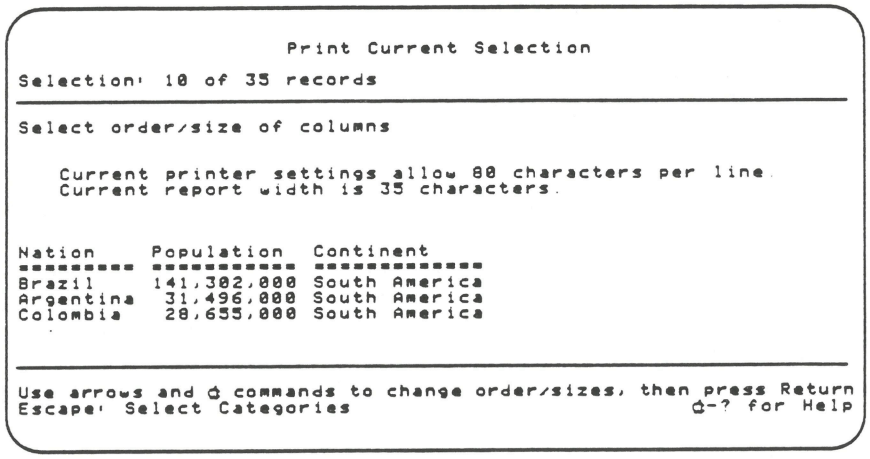

Print Current Selection
Selection: 10 of 35 records
Select order/size of columns
Current printer settings allow 80 characters per line.
Current report width is 35 characters.
Nation Population Continent
Brazil 141,302,000 South America
Argentina 31,496,000 South America
Colombia 28,655,000 South America
Use arrows and ⌘ commands to change order/sizes, then press Return
Escape: Select Categories
⌘-? for Help

Figure 7

4. Add some blank space between columns. Move the highlighted bar to the category "Nation" and press ⌘-> to widen that column a little. Do the same for the other two columns. Press Return when you're through with all the changes.

5. Print the report to the screen. Evaluate how the information looks. If necessary, go back and adjust the columns some more. When you are satisfied with the way the information looks, print the report to the printer.

Tip Long category names will sometimes not appear in their entirety when a report is printed to the screen. When printed to the printer, however, all of the information will appear.

CATEGORY SUMMARY

MECC Dataquest: Latin America contains data on 35 countries in the culture region commonly known as "Latin America." The following list briefly describes each of the categories of information in the database. Except for the first category, "Nation," they are listed in alphabetical order:

Nation – Identifies each nation by the name by which it is most generally recognized among English-speakers rather than its official name. For example, "Mexico" is used, rather than the official "United States of Mexico."

Even though they are not independent nations, Puerto Rico and French Guiana are included because they were deemed likely to play an important role in classroom geography lessons. Both do enjoy a high degree of self-government, but you should nevertheless be aware of the fact that Puerto Rico is a dependency of the United States (and that its citizens are also American citizens) and that French Guiana is a dependency of France.

Agricultural Produce (National) – Cites up to three items of produce, including agricultural products, lumber, and such animal products as seafood, beef, and pork, and dairy products, that are especially important to a nation's economy. The produce items are generally listed in order of economic importance to that nation, although sources and figures often differ widely. The absence of an item from this category for a particular nation does not suggest that item is not important to the economy of that nation—only that the items listed are probably *more* important. For some nations this category may include only one or two items, suggesting either that the economies of those nations are strongly dependent on those items or that the soil and/or climate conditions in those nations are not conducive to successful agriculture.

Agricultural Produce (World) – Cites the items of produce of which a nation contributes *at least 5% of the world's total annual output* for recent years (the 1980s). For some nations this category lists "none," while other nations have a number of items listed. Note that the categories "Agricultural Produce (National)" and "Agricultural Produce (World)" often overlap, and an item may appear in one category for a particular nation but not in the other. For instance, the production of corn may be extremely important to the economy of a particular nation and would thereby be listed under "Agricultural Produce (National)," but that nation's production of corn may be far less than 5% of the world annual total, so corn would *not* appear under "Agricultural Produce (World)" for that nation. By the same token, a nation may produce more than 5% of the world's total production of corn, but other items of produce may be far more important to that nation's economy. In such a case, corn would appear under "Agricultural Produce (World)" for that nation but *not* under "Agricultural Produce (National)."

Arable Land (%) – Provides a percentage figure that indicates the amount of land within a nation that is fit for agriculture—specifically, the raising of crops as opposed to the grazing of animals. The figure is rounded to the nearest whole number.

Area (sq. mi.) – Provides the area of a nation measured in square miles. These figures include inland water (such as lakes) but do *not* include offshore "territorial waters."

CATEGORY SUMMARY (continued)

Birth Rate (per 1000 pop./yr.) – Cites the average number of births annually per 1000 population, based in most cases on estimates from the United Nations (U.N.) for the early and mid-1980s. Figures are calculated to the nearest tenth. For comparative purposes, the overall figure for the entire world for the same period is 29.0 births per 1000 population.

Borders – Lists both the nations and major bodies of water that border on a nation. Because the Gulf of Mexico and the Caribbean Sea are "arms" of the Atlantic Ocean, if a nation borders on either of those smaller bodies of water, it is automatically listed as bordering on the Atlantic Ocean as well. For instance, Mexico borders on the Pacific Ocean, the Gulf of Mexico, and the Caribbean Sea (in addition to the United States, Guatemala, and Belize). Because the Gulf of Mexico and the Caribbean Sea are regions of the Atlantic Ocean, the Atlantic Ocean is also listed as one of Mexico's borders.

Calorie Intake, Daily per Capita – Cites the average daily caloric intake per person for each nation, based on the most recent estimates of the U.N. Food and Agriculture Organization (FAO), in most cases for either 1985 or 1986. For purposes of comparison, the FAO recommends a minimum daily caloric intake of from 2,200 to 2,500, with variations within that range depending on such factors as age, weight, sex, culture, and environment. Figures less than or greatly in excess of that range are considered unhealthy by the FAO.

Capital – Identifies the capital city of each nation. One Latin American nation—Bolivia—has two capitals because different branches of the government are based in different cities. The spelling used is that found in a majority of the geography textbooks and reference works consulted.

Cities, Largest – Lists the three most populous cities in a nation; usually, one of these will be the capital. The spelling used is that found in a majority of the geography textbooks and reference works consulted. In some cases, only one or two cities are listed, indicating that the second- or third-largest largest cities are *much* smaller than the largest one or two. In those instances, it is safe to say that those nations *have* only one or two "principal cities." On the other hand, because three is the *maximum* number of cities listed in this category, it would be quite wrong to assume that most nations have only three principal cities.

Cities with Pop. Over 500,000 – Notes the number of cities in each nation with populations of 500,000 or more. Whenever possible, this is based on figures for populations within formal city limits rather than for "greater metropolitan areas."

Climate Zones – Lists the types of climate found within each nation. The most predominant climate is listed first. Keep in mind that large nations—and sometimes even small ones—include many different climates, although some of those climates may describe very small areas within those nations. ***MECC Dataquest: Latin America*** uses the following climatic terminology:

tropical rain forest	hot and wet all year; sometimes called "wet tropical"
savanna	hot all year with distinct wet and dry seasons; sometimes called "wet-and-dry tropical"

CATEGORY SUMMARY (continued)

steppe	hot summers and cold winters with distinct moist and dry seasons; sometimes called "prairie" or "semiarid"
desert	dry all year and either hot all year or with hot summers and cold winters; sometimes called "arid"
mediterranean	hot and dry summers, mild and moist winters
subtropical	moist all year with hot summers and mild winters; sometimes called "humid subtropical"
marine	mild and moist all year; sometimes called "temperate marine" or "maritime"
alpine	highly variable temperature and precipitation depending on elevation and latitude; sometimes called "highland," "mountain," or "vertical"

There are several other climate zones as well—namely "continental," "subarctic" (or "taiga"), "tundra," and "ice cap" (or "polar")—but these do not occur significantly or at all in any Latin American nations and therefore do not appear in this database. Also, keep in mind that not all nations with "mountains" boast an alpine climate. Relatively low mountains generally do not cause a great enough climatic variation to justify the distinction of an alpine climate.

Continent – Identifies the continent of which each nation is a part. Obviously, for Latin American nations only two continents are listed: North America or South America. Caribbean nations are geographically considered part of North America.

Death Rate (per 1000 pop./yr.) – Cites the average number of deaths annually per 1000 population, based in most cases on U.N. estimates for the early and mid-1980s. Figures are calculated to the nearest tenth. For comparative purposes, the overall figure for the entire world for the same period is 11.0 deaths per 1000 population.

Doubling Time (years) – Cites the number of years in which it is estimated that each nation's population will be twice what it is today. These estimates are based on current rates of population growth.

Energy Consumption per Capita (MW-hr./yr.) – Cites the annual energy consumption per person for each nation, expressed in megawatt-hours (MW/hr.). This data is based on U.N. estimates for 1985 and includes energy consumed in a variety of forms, including fossil fuels and electricity, however generated (hydroelectric, nuclear, geothermal, tidal, etc.). Figures are rounded to the nearest tenth. For purposes of comparison, the approximate annual energy consumption per capita in 1985 *for the world overall* was 18.1 MW-hr.

CATEGORY SUMMARY (continued)

Energy Production per Capita (MW-hr./yr.) – Cites the annual *commercial* energy production per person for each nation, expressed in MW-hr. This data is based on U.N. estimates for 1985 and includes energy produced in a variety of forms, including fossil fuels and electricity, however generated (hydroelectric, nuclear, geothermal, tidal, etc.). Figures are rounded to the nearest tenth. For purposes of comparison, the approximate annual energy production per capita in 1985 *for the world overall* was 15.9 MW-hr. The discrepancy between the overall world figure in this category and that of the energy consumption category can be explained by nations drawing upon stockpiles of stored energy resources (such as petroleum and coal), the difference between commercial energy production and total energy consumption, and the inevitable deviations that arise from estimating and rounding large groups of figures.

Exports – Lists the three most important exports for a nation, based on economic value. The data in this and the next category is derived from information reported by a variety of national and international economic and governmental sources.

Export Destinations – Cites the three nations to which a nation ships the largest shares of its total exports, based on economic value. If a nation has only one or two export destinations listed, those are the only significant export destinations for that nation.

Fertility Rate (avg. births per woman) – Cites for each nation the average number of children born to female citizens who live the entire span of their child-bearing years. This figure is calculated to the nearest one-tenth.

Foreign Debt ($ millions) – Expresses in millions of U.S. dollar equivalence the total debt owed or guaranteed payment by the government of each nation to individuals or corporations based in *other* nations. Most of these figures are for the year 1986.

Form of Government – Describes the type of government that existed in each nation when the ***MECC Dataquest: Latin America*** database was created. The following descriptions are used:

communist republic	Indicates a government dedicated to a Marxist-socialist politico-economic system, which may allow varying degrees of representation but often limits civil liberties and tolerates no political parties other than the one in power.
constitutional monarchy	Indicates a government, usually democratically elected and run in a parliamentary fashion, which is symbolically headed by a monarch with constitutionally limited powers. Latin American nations of this type recognize Queen Elizabeth II of the United Kingdom as their symbolic monarch.
federal republic	Indicates a democratically elected representative government much like that of the United States, in which power is divided between a large central government and a number of smaller regional governments, usually called "states."

CATEGORY SUMMARY (continued)

military	Indicates a government controlled by the military, often dominated by a single individual with dictatorial power. In most cases, political opposition and civil liberties are ruthlessly suppressed.
republic	Indicates a representative form of government that may in practice vary widely in the degree of true democracy and personal freedom allowed. In general, it tolerates more dissent and greater civil liberty than a "one-party republic."

The entries of two nations, French Guiana and Puerto Rico, indicate that they aren't independent but rather are dependencies of France and the United States, respectively.

Gross National Product ($ millions) – Notes (in most cases) the gross national product (GNP) of a nation—that is, the total value of final goods and services produced both from within a nation and from foreign transactions in a given year, usually between 1984 and 1986. For some nations, however, the only figure available is the gross *domestic* product (GDP), which excludes the value of foreign transactions. All figures are expressed in *millions* of U.S. dollars.

Household Size, Average – Cites the average number of people per household, which may consist of a single person living alone, a "nuclear family" unit of one or more parents and their children, or a large extended family grouping that may embrace grandparents and other relatives. Household size is influenced by a wide range of demographic, economic, and cultural factors.

Imports – Lists the three most important imports for a nation, based on economic value. The data in this and the next category is derived from information reported by a variety of national and international economic and governmental sources.

Import Sources – Cites the three nations that provide a nation with the largest shares of its total imports, based on economic value. If a nation has only one or two import sources listed, those are the only significant import sources for that nation.

Industries – Cites up to three major industries for each nation, based on percentage of labor force. "Industries" here refers to general fields of economic endeavor, including agriculture (which again includes both tilling of soil and raising of livestock). Industries that account for the employment of less than 10% of a nation's total labor force are not listed, so only one or two industries may be listed for some nations. In this way, this category suggests how some nations have far greater economic and employment diversity than others.

Infant Mortality Rate (per 1000 births) – Cites the average annual number of children born alive but die before their first birthday per 1000 live births, based in most cases on U.N. estimates for the early and mid-1980s. Figures are calculated to the nearest tenth. For comparative purposes, the overall figure for the entire world for the same period is 65.0 infant deaths per 1000 live births.

CATEGORY SUMMARY (continued)

International Organizations – Lists the major international organizations of which each nation is a member. For French Guiana and Puerto Rico, "not applicable" appears in this category because those two "nations" aren't independent and therefore aren't members of international organizations. Various agencies under the overall aegis of the United Nations are not listed separately. The international organizations noted in ***MECC Dataquest: Latin America*** are as follows:

Caribbean Community – Founded in 1973 as a sort of "Common Market" for the Caribbean region, with economic cooperation as its primary goal. Commonly known as CARICOM, its headquarters are in Georgetown, Guyana.

Commonwealth of Nations – Originally begun in 1926 as a loose but influencial group of nations linked by the common bond of former rule by the United Kingdom. Today its members all recognize the British monarch as either the head of state or the head of the Commonwealth. Cooperation within the Commonwealth is primarily economic and cultural in nature. Formerly known as the "British Commonwealth," its headquarters are currently in Edinburgh, Scotland (United Kingdom).

Council for Mutual Economic Assistance – Founded in 1949 to foster economic cooperation among the communist nations of the "Eastern Bloc." Commonly known as COMECON or the CMEA, its headquarters are in Moscow.

Organization of American States – Founded in 1948 to promote regional security as well as economic and social development. Commonly referred to as OAS, its headquarters are in Washington, DC.

OPEC – The Organization of Petroleum Exporting Countries, founded in 1960 to promote the economic interests of oil-producing nations. Contrary to popular misconception, it is not simply an Arab or Middle Eastern organization, although more than half of its members are indeed in the Middle East. Its headquarters are in Vienna, Austria.

United Nations – Founded in 1945 to foster world peace and cooperation. Most nations are members and new nations generally become members as a matter of course, so non-member nations are worth noting. Commonly referred to as the U.N., its main headquarters are in New York.

Labor Force in Agriculture (%) – Cites the percentage of the labor force that is engaged in agriculture for each nation, as estimated by the FAO. Figures are rounded to the nearest whole number, although all figures less than 1 are expressed as 1. For the purposes of this category, "agriculture" includes the raising of livestock as well as the tilling of soil.

Language, Predominant – Cites the language spoken by the *majority* or *plurality* of the people in each nation, even if it is not the "official" language.

CATEGORY SUMMARY (continued)

Languages, Other – Cites any *primary* language other than the one listed in the "Language, Predominant" category that are either "official" languages or are spoken by at least 1% of the populace. (Primary languages are originally learned through a "natural" process, as opposed to "secondary" languages learned in school. For instance, English is widely learned and spoken as a *secondary* language in many nations for which it is *not* listed.) *No "unofficial" language spoken by less than 1% of the total population is cited*, despite the fact that it may be the second, third, or fourth most commonly spoken language. For this reason, some nations may list "none" in this category. This, of course, does not suggest that no other language is ever spoken in that nation. It simply means that no language other than the predominant one is spoken by more than 1% of that nation's population. The languages are listed according to number of speakers. Therefore, because the "Language, Predominant" category cites the most widely spoken language in a particular nation, the first language listed in *this* category is the *second* most widely spoken language in that nation.

Life Expectancy, Females (years) – Notes the number of years a female infant born in a particular nation in the early or mid-1980s may be expected to live. These figures and those in the next category are calculated to the nearest tenth and are based on actuarial estimates that take into account a wide range of natural and social factors, including nutrition, health care, and violence. These figures do not represent the average age at which people are likely to die once they have grown up. In other words, if the female life expectancy figure for a nation is 70.0, that does *not* mean that the average age of death of the adult females currently living in that nation is 70. Rather, it means that females *born during the 1980s* may be expected to live, on the average, to age 70.

Life Expectancy, Males (years) – Notes the number of years a male infant born in a particular nation in the early or mid-1980s may be expected to live.

Literacy Rate (%) – Cites the percentage of adult persons within a nation who are literate, based in most cases on estimates compiled in the early 1980s by the U.N. Educational, Scientific, and Cultural Organization (UNESCO). Figures are rounded to the nearest whole number. "Literacy" has a wide range of definitions that vary from nation to nation. Some nations define "literate" as the ability to read but not necessarily to write, while others define it as the ability to fill out a form or simply as school attendance to a certain level. In this category, "literacy" means the ability to read and write at least at a level roughly equivalent to that of someone who has successfully completed lower elementary education. Unfortunately, many of people who meet this criterion for literacy would nonetheless be considered functionally illiterate in most industrial and post-industrial societies. Still, the figures in this category provide users of ***MECC Dataquest: Latin America*** with a good idea of the degree to which the adult population of a nation has received at least some formal education.

CATEGORY SUMMARY (continued)

Manufactured Goods – Cites up to three types of manufactured goods the production of which is especially important to a nation's economy. These items are generally listed in order of economic importance to that nation, although sources and figures often differ widely. The absence of an item from this category for a particular nation does not suggest that the item is not important to the economy of that nation—only that the items listed are probably *more* important. For a few nations this category includes only one or two items. Such instances suggest either that manufacturing plays a relatively small role in that nation or that only one or two specific types of manufactured goods dominate the manufacturing sector of that nation's economy.

Military Expense (% GNP) – Notes the percentage of a nation's gross national product that is devoted to military expense, based in most cases on figures published by the individual nations. Many nations, however, do not publish such information, so in those cases the figures cited are based on outside estimates. Even so, for a few nations no reliable figures are available at all. Note also that the dependencies French Guiana and Puerto Rico list "not applicable" in this category because their military expenses are incurred by other nations (France and the United States, respectively). The figures in this category are derived from various years during the early and mid-1980s. Figures are calculated to the nearest tenth. For comparative purposes, the average world figures for the same years range from 5.8 to 6.1.

Military Expense per Capita ($) – Notes a nation's average military expense per person, expressed in U.S. dollars. The same sources and limitations apply to this category as to the preceding one. Figures are rounded to the nearest whole number. Figures less than 0.5 are rounded down to 0.

Minerals and Fuels (National) – Cites up to three minerals and/or fossil fuels the production of which is especially important to a nation's economy. These items are generally listed in order of economic importance to that nation, although sources and figures often differ widely. The absence of an item from this category for a particular nation does not suggest that the item is not important to the economy of that nation—only that the items listed are probably *more* important. For some nations this category may include only one or two items, or even "none." Such instances suggest that the nation is poor in mineral resources, is not yet able to exploit its mineral resources effectively, or relies heavily on just one or two mineral resources.

Minerals and Fuels (World) – Cites the minerals and/or fossil fuels of which a nation produces *at least 5% of the world's total annual output* for recent years (the 1980s). For some nations this category lists "none," while other nations have a number of items listed.

Note that while the categories "Minerals and Fuels (National)" and "Minerals and Fuels (World)" often overlap, a mineral may appear in one category for a particular nation but not in the other. For instance, the production of iron may be extremely important to the economy of a particular nation and would thereby be listed under "Minerals and Fuels (National)," but that nation's production of iron may be far less than 5% of the world annual total, so iron would *not* appear under "Minerals and Fuels (World)" for that nation. By the same token, a nation may contribute more than 5% of the world's total production of iron, but other minerals may be far more important to that nation's economy. In such a case, iron would appear under "Minerals and Fuels (World)" for that nation but *not* under "Minerals and Fuels (National)."

CATEGORY SUMMARY (continued)

Motor Vehicles (per 1000 pop.) – Cites for each nation the number of motor vehicles with four or more wheels used primarily for transport—passenger cars, taxis, buses, and trucks, but not motorcycles, tractors, and other farm or industrial equipment—per 1000 population, based on the most recent available estimates of the United Nations and the International Road Federation, in most cases for the mid-1980s. Figures less than 0.5 are rounded down to 0.

Natural Features – Cites the natural features (such as rivers, mountain ranges, mountain peaks, islands, and deserts) most often mentioned in geography textbooks. "Man-made" features, such as canals and dams, are *not* included. Generally, the larger nations have many entries in this category while smaller nations have fewer. In fact, for some of the smaller nations, *no* natural features are mentioned in geography textbooks. Nevertheless, at least one important natural feature was included for each of those nations as well. If a natural feature appearing in the database lies within the boundaries of more than one nation, it is listed under *all* of the nations within whose boundaries it lies. Similarly, if a natural feature straddles the border of two nations, it is included under both nations. Major rivers forming the borders of nations are also included. Bordering oceans and seas are *not* included; see the data category "Borders" for those.

Natural Increase Rate (per 1000 pop./yr.) – Notes the annual rate of natural increase of population in a country, expressed in terms of persons per 1000 population and based on estimates for the early and mid-1980s. Basically, this figure is obtained by subtracting the death rate from the birth rate. Figures are calculated to the nearest tenth. For those nations in which the death rate exceeds the birth rate, a negative figure appears in this category. For comparative purposes, the overall figure for the entire world for the same period is 18.0.

Newspapers in Circulation (per 1000 pop.) – Cites the number of newspaper copies in circulation per 1000 population, based on the most recent figures available (usually for the early and mid-1980s) from UNESCO. Figures are rounded to the nearest whole number. Figures less than 0.5 are rounded down to 0.

Per Capita Income ($) – Notes the annual per capita income of each nation, expressed in U.S. dollars, based on estimates for the mid-1980s. Basically, this figure is obtained by dividing a nation's GNP figure for a given year by that nation's population figure for the same year. Obviously, it is a gross oversimplification to view per capita income as the average amount of money earned in a year by each person in a particular nation. Nonetheless, these figures are extremely useful as *one factor* to consider in evaluating and comparing the "standard of living" in different nations.

Population – Provides the approximate population living within the borders of a nation according to the most recent figures available from individual governments, the United Nations, and/or other international organizations. In most cases the data is for 1987. Figures are rounded to the nearest thousand.

Population Age 60 and Over (%) – Cites the percentage of a nation's population age 60 and over. These figures are based on U.N. estimates for the early and mid-1980s and are calculated to the nearest tenth.

CATEGORY SUMMARY (continued)

Population Density (per sq. mi.) – Provides for each nation the average number of people per square mile. Figures are rounded to the nearest tenth. Basically, these figures are obtained by dividing the overall population figures by the area figures, although the figures given here may not match *precisely* those you might obtain by dividing the population and area figures provided in the database because of the rounding of the figures in the "Population" category.

Population per Physician – Cites the number of people per physician in each nation according to the most recent figures available from the World Health Organization, in most cases for either 1984 or 1985.

Population Under Age 15 (%) – Cites the percentage of a nation's population under the age of 15. These figures are based on U.N. estimates, in most cases for the early and mid-1980s, and are calculated to the nearest tenth.

Precipitation, Annual Avg. (in.) – Cites the average annual precipitation for each nation, expressed in inches. Figures are rounded to the nearest tenth. Precipitation in the form of snow is converted to its equivalent in rainfall. For nations with several different types of climates, average annual precipitation for various locations within the nation are averaged together to result in an average for the nation as a whole. Obviously, for very large nations such as Brazil and Mexico many different locales are used, and average annual precipitation for the different locations can range anywhere from virtually nothing to well over 100 inches per year. Even very small nations, such as some islands, can have startling variations, depending on where the measurements are taken. Still, the technique of averaging the figures for different locations is used to obtain a national average figure that, despite its indisputable shortcomings, is nonetheless useful for comparing nations.

Projected Population, Year 2000 – Provides an estimate of the most likely population of a nation in the year 2000, based on current trends and patterns of birth, death, and migration. The source of the projection figures varies. In many cases it is the government of the nation itself, but often it is an outside agency, such as the United Nations or the World Bank. Figures are rounded to the nearest thousand.

Radios (per 1000 pop.) – Cites the number of radio receivers per 1000 population, based on the most recent figures available (in most cases for 1986) from UNESCO. Figures are rounded to the nearest whole number. Figures less than 0.5 are rounded down to 0.

Religion, Predominant – Cites the religion practiced by the *majority* or *plurality* of the people in each nation.

Religions, Other – Cites up to three religions other than the one listed in the "Predominant Religion" category. The religions cited are the three most commonly practiced other than the predominant religion. However, *no religion practiced by less than 1% of the total population is cited*, despite the fact that it may be the second, third, or fourth most commonly practiced religion. For this reason, some nations may list "none" in this category, while others may have only one or two religions listed. The phrase "Religion discouraged" may appear, meaning that the government represses religion, although most of the people have not rejected religion altogether.

CATEGORY SUMMARY (continued)

School Attendance (%, children) – Provides an estimate of the percentage of school-age children within each nation who attend primary and secondary school (Grades 1-12 or their equivalent). These figures are derived from demographic patterns and school attendance figures reported by each nation. School attendance is influenced by many political, economic, and cultural factors, ranging from lack of teachers and government support for education to the fact that children often leave school to work in order to make a living for themselves or their families.

Telephones (per 1000 pop.) – Cites the number of telephones per 1000 population, based on the most recent figures available (in most cases for 1986) from UNESCO and the U.N.-affiliated International Telecommunications Union. Figures are rounded to the nearest whole number. Figures less than 0.5 are rounded down to 0.

Televisions (per 1000 pop.) – Cites the number of television receivers per 1000 population, based on the most recent figures available (in most cases for 1986) from UNESCO. Figures are rounded to the nearest whole number. Figures less than 0.5 are rounded down to 0.

Temperature, January Average (degrees F) – Cites the average January temperature for each nation, expressed in degrees Fahrenheit. Figures are rounded to the nearest whole number. The average temperature for the month takes into account both the average high daytime temperature and the average low nighttime temperature. As with the "Precipitation, Annual Average" category, average temperature can vary widely from one part of a nation to another, especially in larger nations. Again, the technique of calculating the average from a variety of locations within the larger nations is used. In this way, a national average figure is obtained, which despite its shortcomings, is useful for comparative purposes.

Temperature, July Average (degrees F) – Cites the average July temperature for each nation, expressed in degrees Fahrenheit. Methodology is identical to that of the "Temperature, January Average" category.

Urban Population (%) – Cites the percentage of a nation's population living in urban areas. These figures are based on estimates of each nation's government for the early 1980s and always assume a strict urban-rural dichotomy, with the percentages for the two always totaling 100. Unfortunately, governments define "urban" in different ways. For instance, some governments define "urban" as being in excess of a particular population density, while others define it as those areas in which the predominant economic activities are nonagricultural. Despite these inconsistencies, these figures are useful for comparative purposes.

Year of Independence – Notes the year in which each nation gained its independence from a former colonial power. Sources may list different years of independence because they use varying criteria to determine "independence." The years listed in ***MECC Dataquest: Latin America*** are those used in the majority of textbooks and reference works consulted.

RESEARCH TOPICS

1. What characteristics do all or most of the nations in Latin America have in common? Why is this part of the world so often described as "Latin"?

2. Which nations in Latin America seem to be "atypical"? In other words, which ones don't seem to "fit in" with the others? How are these nations unusual and why do you think they became different from other Latin American nations?

3. What are the two most most populous nations in Latin America? How do they compare and contrast in terms of economic development and natural resources?

4. Which Latin American nations have the highest and lowest population densities? What factors seem to influence population density?

5. Which Latin American nation would you say is the "richest"? Which is the "poorest"? On which categories do you base your judgment?

6. What factor(s) probably has the greatest influence upon whether a country produces 5% or more of the world's output of many different minerals?

7. In which Latin American nations are bananas, cassava, sugarcane, and/or beef important produce? Why are they grown or raised where they are?

8. How does life expectancy relate to economic development?

9. Which Latin American nation has the "youngest" population? Which has the oldest? How might the factor of average age affect governmental planning policies regarding education, labor force, and population control?

10. Is there a direct relationship between the area of a country and its power and economic strength? Why or why not?

11. Is there a direct relationship between higher death rates and such factors as caloric intake and per capita income? Why or why not?

12. Which three Latin American nations have, on the average, the highest per capita incomes? What factors might account for this?

13. Which Latin American nations seem to be most closely linked to the United States politically and/or economically?

14. Compare and contrast the Latin American nations with the United States. (Use encyclopedias, atlases, almanacs, and/or other database programs to obtain information about the United States.) Answer the following questions:

    a. How do standards of living in Latin America compare to that of the United States?

    b. Which Latin American nation would you say is most like the United States and why?

RESEARCHING A QUESTION

1. Preliminary Questions:

   A. _____

   B. _____

2. Research Question:

   _____

   _____

3. Hypothesis:

   _____

   _____

4. Database Categories to Research:

   _____ _____

   _____ _____

   _____ _____

   _____ _____

   _____ _____

RESEARCHING A QUESTION (continued)

5. Brief Description of Findings:

6. Generalization:

7. Supporting Facts:

SORTING THE DATA

1. Categories on Which to Sort:

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

2. Actual Sort:

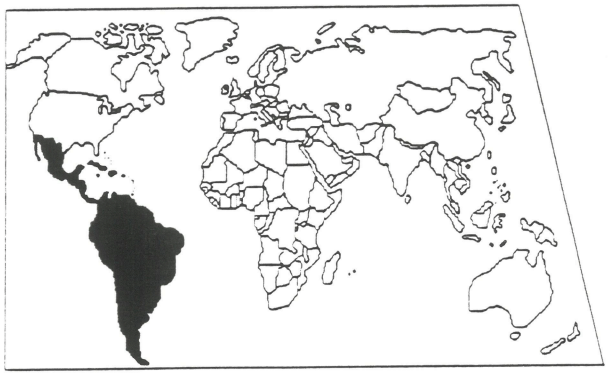
Categories (in Order Sorted)	Value Entered
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

3. Revised Sort:

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

MAP OF LATIN AMERICA

The map below depicts that part of the world known as "Latin America." Label as many nations as you can with their correct names. Which nation borders the United States?



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Appendices

CREDITS

MECC Dataquest: Latin America was produced by a MECC development team that included Roger Shimada, Wayne Studer, and Nelson Whyatt.

MECC Dataquest Composer, the database program upon which ***MECC Dataquest: Latin America*** is based, was designed by a MECC development team that included Craig Copley, Ron Hane, Charolyn Kapplinger, Shane McCarron, Roger Shimada, and Paul Wenker.

TO THE READER:

MECC has made every effort to ensure the instructional and technical quality of this courseware package. Your comments—as user or reviewer—are valued and will be considered for inclusion in any future version of the product. Please address comments to:

MECC Courseware Development
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St. Paul, MN 55126

U.S. DATA FOR COMPARATIVE ACTIVITIES

You may want to plan some classroom database activities that involve comparing the United States to the nations in Latin America. ***MECC Dataquest: Latin America*** does *not* include data for the United States. If, however, you find such comparative activities of interest, you may wish to use ***MECC Dataquest Composer*** to add the following information about the United States to the ***MECC Dataquest: Latin America*** database. To use ***MECC Dataquest Composer***, you need a computer in the Apple II series with at least 128K of memory and, ideally, two 5.25" disk drives. Simply follow these instructions:

1. Start your computer with the ***MECC Dataquest Composer*** disk in Drive 1 and the ***MECC Dataquest: Latin America*** disk in Drive 2.

2. When the main menu screen appears, select Option 2, Edit a Database.

3. When the Edit a Database menu appears, select Option 2, Add or Edit Records.

4. The Add or Edit Records screen will appear, with information for the nation of Antigua and Barbuda appearing first. Hold down the Open Apple (Ó) Key and press the Number 9 Key; this will move you to the last record in the database, Venezuela.

5. When the information for Venezuela appears, hold down the Apple Key once again and press the Down Arrow (↓) Key to move to a "blank" data-entry screen. You're now ready to enter the following data for the United States. The units involved are described on Handout 3, "Category Summary." For additional information about how to enter data into a ***MECC Dataquest Composer*** database, see the ***MECC Dataquest Composer*** support manual.

Nation:	United States of America
Agricultural Produce (National):	corn wheat soybeans
Agricultural Produce (World):	apples apricots barley beef cherries citrus fruit corn cotton dairy products eggs fruit (miscellaneous) lumber oats peanuts peaches pears plums pork potatoes poultry seafood strawberries sugar beets
Agricultural Produce (World): (continued)	tobacco vegetables (miscellaneous) wheat wine
Arable Land (%):	21
Area (sq. mi.):	3,679,192
Birth Rate (per 1000 pop./yr.):	15.5
Borders:	Canada Mexico Arctic Ocean Bering Strait Atlantic Ocean Gulf of Mexico Pacific Ocean
Calorie Intake, Daily per Capita:	3,641
Capital:	Washington, DC
Cities, Largest:	New York Los Angeles Chicago
Cities with Pop. Over 500,000:	24

Climate Zones:	continental subtropical steppe desert subarctic alpine marine tundra mediterranean savanna tropical rain forest
Continent:	North America
Death Rate (per 1000 pop./yr.):	8.9
Doubling Time (years):	99
Energy Consumption per Capita (MW-hr./yr.):	85.8
Energy Production per Capita (MW-hr./yr.):	67.3
Exports:	machinery food (miscellaneous) chemicals
Export Destinations:	Canada Japan Mexico
Fertility Rate (avg. births per woman):	1.8
Foreign Debt ($ millions):	no data available*
Form of Government:	federal republic
Gross National Product ($ millions):	4,235,000
Household Size, Average:	2.6
Imports:	petroleum petroleum products motor vehicles
Import Sources:	Japan Canada Mexico
Industries:	services commerce manufacturing
Infant Mortality Rate (per 1000 births):	10.2
International Organizations:	Colombo Plan NATO Org. for Economic Cooperation and Development
International Organizations: (continued)	Organization of American States United Nations
Labor Force in Agriculture (%):	3
Language, Predominant:	English
Languages, Other:	Spanish
Life Expectancy, Females (years):	78.2
Life Expectancy, Males (years):	71.0
Literacy Rate (%):	96
Manufactured Goods:	processed food machinery motor vehicles
Military Expense (% GNP):	6.4
Military Expense per Capita:	1,001
Minerals and Fuels (National):	coal natural gas petroleum
Minerals and Fuels (World):	aluminum barium cadmium coal copper gypsum iron lead limestone magnesium marble mercury molybdenum natural gas petroleum phosphates potash salt selenium silver sulfur tellurium titanium tungsten uranium vanadium zinc
Motor Vehicles (per 1000 pop.):	714
Natural Features:	Aleutian Islands Appalachian Mountains Chesapeake Bay Colorado River Death Valley Grand Canyon

Natural Features (continued):	Great Basin Great Plains Great Salt Lake Hawaiian Islands Lake Erie Lake Huron Lake Michigan Lake Ontario Lake Superior Mississippi River Missouri River Mojave Desert Mount McKinley Niagara Falls Ohio River Rio Grande River Rocky Mountains Saint Lawrence River Sierra Nevada Mountains Sonoran Desert Yukon River
Natural Increase Rate (per 1000 pop./yr.):	6.6
Newspapers in Circulation (per 1000 pop.):	259
Per Capita Income ($):	$17,600
Population:	243,773,000
Population Age 60 and Over (%):	16.7
Population Density (per sq. mi.):	66.3
Population per Physician:	438
Population Under Age 15 (%):	21.6
Precipitation, Annual Avg. (in.):	28.8
Projected Population, Year 2000:	267,995,000
Radios (per 1000 pop.):	2,000
Religion, Predominant:	Christianity (Protestant)
Religions, Other:	Christianity (Catholic) Judaism Christianity (Eastern)
School Attendance (%, children):	84.6**
Telephones (per 1000 pop.):	769
Televisions (per 1000 pop.):	769
Temperature, January Average (degrees F):	35
Temperature, July Average (degrees F):	74
Urban Population (%):	73.7
Year of Independence:	1776

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*While no figures are readily available for U.S. foreign debt, the *total* U.S. public debt for 1987 was approximately $2,370.4 billion (or $2,370,388.0 million).

**If an 84.6% school attendance rate for children in the United States sounds low to you, consider the fact that, according to the U.S. Department of Education's National Center for Education Statistics, the dropout rate for U.S. high schools in 1986 was no less than 28.5%.

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MODIFYING *MECC DATAQUEST: LATIN AMERICA*

MECC Dataquest: Latin America is a read-only database; that is, it is designed in such a way that the information it contains cannot be changed under ordinary circumstances. This is to prevent students from accidentally or intentionally changing the information as they use the database. Teachers, however, may want to modify the database for several reasons, including:

- to update the database to conform with changes that may have taken place since it was released (such as population and other demographic changes);
- to enter information about nations that were not included in the database (for instance, if you wanted students to use this database to compare Latin American nations with the United States, you could collect and add data for the United States);
- to enter additional categories of data (such as "Form of Government" or "Head of State") about nations already included in the database to make it more compatible with your particular lesson plans.

To change the database, you must use ***MECC Dataquest Composer*** (No. A-172), and to use ***MECC Dataquest Composer***, you need the following equipment:

- an Apple //e (with an extended 80-column card), //c, or IIGS computer *with at least 128K of memory*; and
- at least one disk drive, although *two disk drives are highly recommended.*

You will need to follow the instructions in Part 1 (pages 9-37) of the ***MECC Dataquest Composer*** manual to modify ***MECC Dataquest: Latin America*** in the same manner as you would any database you create yourself with ***MECC Dataquest Composer.***

Be sure to make a backup copy of the original *MECC Dataquest: Latin America* disk before you make any changes to it. Better yet, make changes only to a copy, and save the original disk as you received it. Because it is copy-protected, ***MECC Dataquest: Latin America*** can be copied in only two ways. You must do one of the following:

- use the ***MECC Copy System***, which is available to institutions with MECC site-licensing memberships; or
- use Option 2, Copy a Database, on the ***MECC Dataquest Composer*** Other Activities menu (see page 36 of the ***MECC Dataquest Composer*** manual).

Simply changing existing information in the database to update it is a relatively simple, straightforward process that shouldn't cause any program memory problems. If, however, you want to add a large number of additional countries or categories to the database, disk memory limitations may force you first to delete existing countries or categories. In deciding which countries or categories to delete, carefully consider the types of questions you want your students to answer using the database.

USING A PRINTER WITH THIS COURSEWARE

A printer may be used with ***MECC Dataquest: Latin America***. To connect your printer to your computer, you may need to insert the appropriate printer card (called an "interface card") into a slot in the computer. ***MECC Dataquest: Latin America*** is initially set to work with an Apple Parallel Card or an Apple Serial Card located in either Slot 1 or Slot 2. If you have this setup, you do not need to do anything further. Some computers (such as the Apple //c and IIGS) have ports in the back to which you may connect your printer.

If your printer uses a setup different from the one described above or if you need or want to enter special printing commands, you will need to use the printer options that are found on the Other Activities menu (Figure 1).

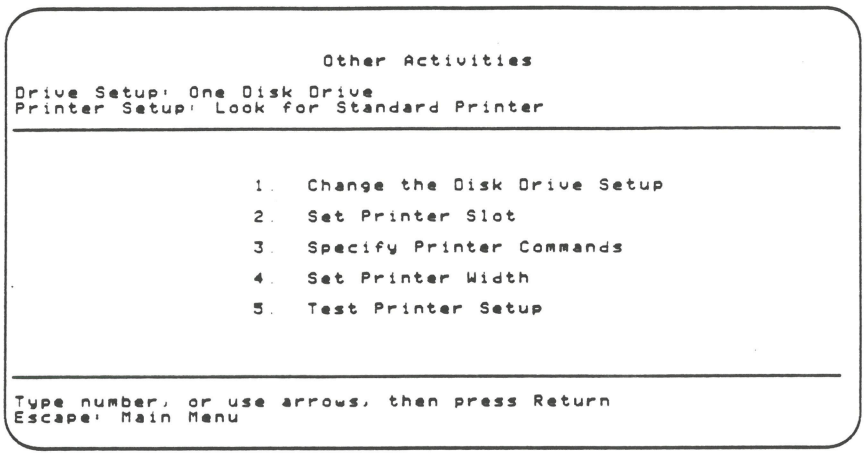
Other Activities
Drive Setup: One Disk Drive
Printer Setup: Look for Standard Printer
1. Change the Disk Drive Setup
2. Set Printer Slot
3. Specify Printer Commands
4. Set Printer Width
5. Test Printer Setup
Type number, or use arrows, then press Return
Escape: Main Menu

Figure 1

- **Setting the Printer Slot**

  If you wish to specify the slot number in which the printer interface card is located, you must select Option 3 from the Other Activities menu.

- **Specifying the Printer Commands**

  Special commands enable certain types of printers to operate and permit special printing formats. These commands are listed in the manual that came with your printer or interface card. Select Option 4 from the Other Activities menu to enter special commands. Type the exact control characters required and, when finished, press ^ (Shift-6). The commands that you specify are saved on the ***MECC Dataquest: Latin America*** disk and are permanent until you change the printer settings.

- **Setting the Printer Width**

  A printer will ordinarily print 80 characters per line. If your printer, however, has a wide carriage or if you have specified printer commands that allow more characters per line, you must use Option 5 on the Other Activities menu to indicate the new width.

  Note: Do not set up your printer to use a proportional font. If you do, the resulting printouts will not be correctly formatted.

- **Testing the Printer Setup**

  Using Option 6 on the Other Activities menu, you can test your printer setup by printing characters to the width of your printer. If these characters do not appear, check to see whether you have connected your printer correctly or check your printer or interface card manual for any special commands that may be required.

MECC SERVICES

Since its inception in 1973, MECC has remained committed to serving education by listening and responding to the diverse and changing needs of students and educators. MECC promotes effective learning by developing high-quality, curriculum-based software in all major subject areas and by making them affordable through a variety of purchase plans. Approximately one-third of the nation's school districts have joined MECC through Direct License memberships, permitting them to duplicate MECC software products on site. MECC products are also available through authorized dealers nationwide or can be ordered directly from the MECC catalog. In addition to software products, MECC offers instructional management, emerging technology products, teacher training and development, and conferences. An academic research partnership, the MECC/University of Minnesota Center for the Study of Educational Technology, conducts a variety of studies on the impact of technology on education. MECC respects the challenges faced by modern educators and pledges to remain on the cutting edge of technology.

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- **Help Line**
  If you have any problems using MECC software:
  1) make note of the *name* and *version number* of the product;
  2) note the *brand* and *model* of the equipment involved, as well as the type of *printer card* used if the problem concerns a printer;
  3) write or call the Help Line to describe the problem.

For information on all the above items, use the MECC General Information telephone number: 612/481-3500.

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